# fJf^f⊡fO

 $fJf^fDfO,iŠT-v$   $fJf^fDfO,., dDicardel{eq:heat}$   $fJf^fDfO,ifefNfifbfN, f, A, c, A$   $fJf^fDfO,ifefNfifbfN, f, A, c, A$   $fJfefSfŠ, AfTfufJfefSfŠ, iDiD^{-1}$   $fhf%fbfO&fhfDfbfv, \deltaŽg-p, \mu, \frac{1}{2}fJf^fDfO$   $IfJf^fDfO,., dIfRf ff, \deltaŽg-p, \mu, \frac{1}{2}fJf^fDfO$  fJfefSfŠ, i ODW fCfRD(fhDi n, iDXDV

## <sup>∭</sup>fJf^f⊡fO fJf^f⊡fO,ÌŠT—v

,±,Ì□ĺ,Å,Í□AflfŠfWfif<ftf@fCf<,ÌfJf^f□fO,ÉŠÖ,·,éŠT—v,ð□à-¾,µ,Ü,·□B<u>f]f^f□fO</u>,·,é,Æ,Í□AfŒfR□[fh,ð□ì□¬,µ□A□ê□‡,É,æ,Á,Ä,Í,»,ÌfŒfR□[fh,ð<u>f]fefSfŠ</u>,É,Ü,Æ,ß,é, ±,Æ,Å□AflfŠfWfif<ftf@fCf<,Ì□î•ñ,ð"□□‡,·,éŽè□‡,ð^Ó-¡,µ,Ü,·□B

ftf@fCf<,ðfJf^f□fO,É'Ç

‰Ă,μ,ÄfŒfR□[fh,ð□ì□¬,·,é,Æ□AŒ³,ÌfffWf^f‹f‹f□fffBfAftf@fCf‹,ÉŠÖ,·,é,³,Ü,´,Ü,È□î•ñ□iftf@fCf‹-¼□Aftf@fCf‹,Ì□ê□Š□Aftf@fCf‹Œ`Ž®□A‰ð'œ"x,È,Ç□j,ðŒ©,é,±,Æ,ª,Å,«,Ü,·□BfJfefSfŠ,ðŽg p,μ,Ä'¼Š´"I,ÅŽg,¢,â,·,¢ŠK'wfOf‹□[fv,ÉfŒfR□[fh,ð'g□D‰»,Å,«,Ü,·□B

 $\begin{array}{l} Cumulus, \dot{l}, \ \acute{e}fRf''fsf...[[f^, \acute{e} \hat{U}' \P, ^3, \acute{e}, \frac{1}{2}ftf@fCf<, \deltafJf^f[]fO, \cdot, \acute{e}, \pounds []ACumulus, \acute{l}, », \dot{l}fRf''fsf... \\ [[f^, \dot{l}flfyf \pounds [][fefBf''fOfVfXfef \in (Macintosh, \ddot{U}, \frac{1}{2}, \dot{I}Windows), \pounds [] \ddagger, \acute{l}, ^1, \ddot{A}ftf@fCf<- \frac{1}{4}, \pounds fpfX, \delta \underline{Z} \underline{C} (" @ " I, \underline{\acute{E}}' 2 ] @ , \mu, \ddot{U}, \cdot ] B \end{array}$ 

fJf^f□fO,·,é'O,É<u>fJf^f□fO,·,é</u>Ţ<u>Û,Ì^ê"Ê"I,È<K'¥</u>,ð,æ,ŒŸ"¢ ,μ□A,Ü,½<u>fJf^f□fOfIfvfVf±f"</u>,Ì□Ý'è,ªJJf^f□fO,Ì"®□Ì•û-@,É'¼□Ú‰e<¿,·,é,±,Æ,É'□^Ó,μ,Ä,,¾,³,¢□B

ŽŸ,Ì2,Â,Ì∙û–@,ÅfŒfR□[fh,ðfJf^f□fO,Å,«,Ü,·□B

[f]f^f□fO,·,é]fRf}f"fh,ðŽg—p

,±,Ì'¼,É□AVisual Basic,Ü,½,Í,»,Ì'¼,ÌOLE□€<'fvf□fOf‰f~f"fOfc□[f<,ðŽg,Á,Ä□Afvf□fZfX,ð<u>Ž©"®</u> <u>‱»</u>,·,é,±,Æ,à,Å,«,Ü,·□B

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## <sup></sup>∭fJf^f□fO fJf^f□fO,∙,é□Û,Ì^ê"Ê"I,È‹K'¥,É,Â,¢,Ä

#### □E Cumulus,Ì—˜—pŒv‰æ,ð□ì□¬,·,é

ftf@fCf<ŠÇ—[],Ì'S"-ŽÒ,ðŒ^'è,µ,½,ç[]ACumulus,ð,Ç,Ì,æ,¤,É<u>Žg—p,·,é</u>,©,ðŒ^'è,µ,Ü,·[]B

#### **□E** ~\_**—□**"I,Èftf@fCf<,Ì**-¼'O•t**,<sup>-</sup><K'¥,ð**□**ì**□¬,**•,é

$$\begin{split} & \mathbb{E} \mathscr{G} \otimes \hat{\mathbb{E}}^{\mathsf{H}} [\hat{\mathbb{E}} ftf@fCf\langle,\hat{\mathbb{E}}^{+}_{4}(O\bullett,\bar{\mathbb{E}},\hat{\mathbb{E}}^{-}_{4}$$

#### □E ftf@fCf‹,ð~\_—□"I,É□\□¬,³,ê,½ftfHf‹f\_,É□®—□,·,é

flfŠfWfif<,ðfffBfŒfNfgfŠ,É,Ü,Æ,ß,é[]ê[]‡[]A[]«—^,Ìfvf[]fWfFfNfg,¨,æ,ÑfA[[f]fCfu—vŒ[],ð[] ¶,μ,Ä,,¾,³,¢[]BflfŠfWfif<,ĺfvf[]fWfFfNfg•Ê,Ü,½,ĺf^fCfv•Ê[]ifrfffl[]Afl[][fffBfl[]AfOf ‰ftfBfbfNfX[]A,¨,æ,ÑfŒfCfAfEfgftf@fCf<[]j,É•ª—Þ,μ[]AŽŸ,ÉŒ`Ž®•Ê,É•ª—Þ,·,é,± ,Æ,ª,Å,«,Ü,·[]B,½,Æ,¦,Î]AVideo,Æ,¢ ,¤ftfHf<f,ÉQuickTime[]AAVI[]A,Ü,½,ĺMPEG,È,Ç,ÌfTfuftfHf<f,ð[]ì[]¬,Å,«,Ü,·[]B

flfŠfWfif‹,ðfJf^f□fO,·,é'O,É•Ò□¬,·,é,± ,Æ,É,æ,Á,Ä□AŠÈ'P,Èf□f"fXfefbfv,ÅfJfefSfŠ,ÆfŒfR□[fh,ð"⁻Žž,É□ì□¬,·,éCumulus,Ì‹@"\,ð—~—

 $p, \dot{A}, «, \ddot{U}, \Box B \Box \dot{U} \Box \times, \dot{I} \Box u \underline{\check{Z} \circ}^{''} \underline{\circ}^{''} \underline{\circ}^{''} \underline{\circ}^{''} \underline{i} \underline{\Box} \underline{\Box} -, \underline{3}, \underline{\acute{e}}, \underline{\overset{1}{\mathcal{A}}} \underline{f} \underline{J} \underline{f} \underline{e} \underline{f} \underline{S} \underline{f} \underline{S}, \underline{\acute{e}}, \underline{\overset{1}{\mathcal{A}}} \underline{\Box} v, \delta \check{Z} Q \Box \overline{\mathcal{A}} \overline{E}, \mu, \dot{A}, \underline{3}, 4, 3, 4 \Box B$ 

#### **□E ~\_—□"I,ÈfŒfR□**[fh,Ì-¼'O•t,<sup>-</sup><K'¥,ð**□ì□**¬,∙,é

—v<[],É[]‡,í,<sup>1</sup>,Ä[]A~\_\_["I,ÈfŒfR[][fh,Ì-¼'O•t,~<K'¥,ð[]ì[]¬,μ,Ä,-,¾,³,¢[]B,½,Æ,¦,Î[]Afvf[]fWfFfNfg,É"Ô[]†,ð•t,<sup>-</sup>,ÄŠÇ—[],μ,Ä,¢ ,é[]ê[]‡,Í[]A[]ê[]‡,É,æ,Á,Ä,Í,»,Ì"Ô[]†,ðfŒfR[][fh-¼,ÉŠÜ,ß,é•K—v,ª, ,è,Ü,·(—á *fvf*[]*fWfFfNfg12345 ABCŠ″Ž*® ‰*ïŽĐ*)[]B,Ü,½[]AŒã,ÅŒŸ[]õ,·,é,Æ,«,Ì,½,ß,É[]A'¼ŠÏ″I,É,í,©,é[]î•ñ,ðŠÜ,Þ-¼'O(—á fWf‡fu"Ô[]†,â•ÛŠÇ[]ê[]Š),ð[]ì[¬,·,é,±,Æ,à]I—¶,μ,Ä,,¾,³,¢]]B

ŠÇ—[][Ó"CŽÒ^ÈŠO,Ìf†[][fU,ªŒë,Á,ÄfŒfR[][fh-¼,ð•t,¯,é,±,Æ,ð-hŽ~,µ,Ä,,¾,³,¢[]B,»,¤,µ,È,¢, ,Æ[]Af]f^f[]fO,µ,½f†[][fU,É,µ,©—[]‰ð,Å,«,È,¢[]A^Ã[]†,Ì,æ,¤,ÈfŒfR[][fh-¼,²ŠÜ,Ü,ê,½f]]f^f[]fO,ª[]ì[]¬,³,ê,Ü,·[]B

#### **□E 'ÌŒn"I,ÈfJf^f**□fOŽè□‡,ð□ì□¬,∙,é

'ÌŒn"I,ÈfJf^f⊡fO‰»Žè□‡,ð□ì□¬,·,é,±,Æ,Å□Aftf@fCf<,Ì-¼'O•t,⁻□AfffBfŒfNfgfŠ,Ì□®— □□AfŒfR□[fh,Ì-¼'O•t,⁻,ª□AfJf^f□fO,·,é□Û,É□í,É^êŠÑ,μ,½,à,Ì,É,È,è,Ü,·□B'·Šú"I,É,Ý,ê,Î□A,± ,ê,É,æ,èfJf^f□fO,ª,æ,èŽg,¢,â,·,,È,è,Ü,·□B

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# ∭fJf^f<u></u>f0

#### Ĭ <sup>™</sup>fJf^f□fO,·,é□Û,Ì^ê"Ê"I,È‹K'¥,É,Â,¢,Ä Ž©"®"I,É□ì□¬,³,ê,éfJfefSfŠ,É,Â,¢,Ä

 $\begin{array}{l} \underbrace{ftf@fCf<}_{,}\deltaflf^{flfO},\cdot,\acute{e},\&lastic ftf@fCf<}_{,}lfpfX,^{a}lv,\mu,&flfefSfŠ,&\mu,AŽ©"@"l,Élill¬,³,ê,Ü,·lB},\\ \underline{,+}\\ \underline{,$ 

 $, \hat{e}, \hat{c}, \hat{l} j f e f S f \check{S}, \hat{l} \square A \check{Z} \hat{e}^{*} \otimes , \hat{A} \square \hat{l} \square \neg, \mu, \frac{1}{2} f j f e f S f \check{S}, \mathcal{E}, \hat{l} \hat{\Box}, \hat{e}, \partial f J f e f S f \check{S}, f t f H f \cdot f_{,\hat{a}}, \hat{e}, \ddot{A}, \hat{e}, \ddot{\Box}, \dot{C} f R f^{*}, \dot{E} \square \neg, \hat{a}, \hat{E} f t f H f \cdot f_{,\hat{a}} \in (\dot{A}, \dot{A}, \dot{A}, \dot{C}, \dot{\Box}, \dot{A})$ 

,±,Ì‹@"\,Í□AfpfX,ðflfŠfWfif‹<u>ftf@fCf‹</u>,É'Ήž,³,¹,Ü,·□B,μ,½,ª,Á,Ä□A,±,ê,ðŽg p,μ,ÄŒ³,Ìftf@fCf‹,ð,·,Î,â,ŠÈ'P,ÉŒ©,Â,⁻,é,±,Æ,à,Å,«,Ü,·□B,±,ÌflfvfVf‡f",ð—LŒø,Ü,½,Í– ³Œø,É,·,é□Û,Ì□Ú□×,Í□A<u>□uftfHf‹f\_-¼,ðfJfefSfŠ"o~^,.,é□v</u>,ðŽQ□Æ,μ,Ä,,¾,³,¢□B

{button ,AL(`catalog',0,`',`')}  $\underline{SO^{A} \subseteq -U}$ 

## <sup></sup>∭fJf^f⊡fO fJf^f⊡fO,ÌfefNfjfbfN

^ȉº,Ì2,Â,Ì^ê″Ê"I,ÈfefNfjfbfN,Ì,¤,¿,¢, \_,ê,©,ðŽg—p,μ,Ü,·□B

#### **□E □æ,ÉflfŠfWfif**<,ð•Ò**□**¬,·,é

 $\begin{array}{l} ,\pm,\dot{i}\cdot\dot{u}-@,\dot{A},\dot{i}[A,\ddot{U},\cdot]fJ\check{S}fWfif<,\check{\delta}^{-}--["I,\dot{E}ftfHf<f_[]\'¢,\acute{E}\cdot\dot{O}[\neg,\mu,\ddot{A},@,c]Aftf@fCf<,\check{\delta},C,\pm,\acute{E}\cdot\dot{U}`\P,\cdot,\acute{e},@,\check{\delta}E^{-}\dot{e},\mu,\ddot{U},\cdot]BftfHf<f_,\dot{I}WindowsfGfNfXfvf[][[f‰,@,cf]f^f]fOfEfBf"fhfE,Éfhf %fbfO&fhf]]fbfv,Å,«,Ü,\cdot]BftfHf<f_,\dot{A}fpfX,\dot{\delta}fIf\check{S}fWfif<ftf@fCf<,\acute{E}f}fbfv,\cdot,\acute{e}[]V<Kf]fefSfŠ,ªŽ@" @"I,É[]i[]¬,³,ê,Ü,\cdot]B \\ \end{array}$ 

#### **□E fJfefSfŠ,ð□ì□**¬,μ**□AfJf^f□fO,**·,é

,±,Ì•û-@,Å,Í<code>[</code>A<u>fJfefSfŠ</u>,ðŽg,Á,ÄfŒfR<code>[[fh,ð•Ò</code>]¬,Å,«,Ü,·<code>[</code>BŒø—¦,Ì,æ,¢<code>[</code>A,æ,<code>[</code>]— ¶,³,ê,½fJfefSfŠ[\'¢,ð[]<code>[</code>¬,µ,Ä<code>[</code>AfIfŠfWfif<ftf@fCf<,ðfJf^f[]fO,µ<code>[</code>AŠY"-,·éfJfefSfŠ,ðfŒfR<code>[[fh,É"o</code>~,µ,Ü,·<code>]</code>B

fIfŠfWfif<,ðfJf^f□fO,·,é□ê□‡□AŽŸ,Ì,¢,\_,ê,©,Ì•û-@,ðŽg—p,Å,«,Ü,·□B

WindowsfGfNfXfvf[][[f‰,©,çfhf‰fbfO&fhf[]fbfv

<u>□mfJf^f□fO,·,é□nfRf}f"fh</u>

{button ,AL(`catalog',0,`',`')}  $\underline{SO^{A} \subseteq \underline{-U}}$ 

# ∭fJf^f□fO fJfefSfŠ,ÆfTfufJfefSfŠ,Ì□ì□¬

<u>fJf^f⊡fO</u>,É,Í□AfJfefSfŠ,ÆfŒfR□[fh,Ì—¼•û,Ì□ì□¬,ª•K v,Å,·□BfJfefSfŠ,Í□AfJf^f⊡fO•Ò□¬□ã,ÌfofbfNf{□[f",Å,·□BŒø—¦"I,È•Ò□¬,¨,æ,Ñ•ª—ÞfVfXfef€,Æ<— Í,ÈfŒfR□[fhŒŸ□õfVfXfef€,Í□AfJfefSfŠ,É,æ,Á,Ä—^,¦,ç,ê,Ü,·□B

fJfefSfŠ,ð[]ì[¬,·,é'O,É[]A,Ü,,ƒŒfR[[fh,ð,Ç,Ì,æ,¤,É•Ò[]¬,¨,æ,Ñ•ª—Þ,µ,½,¢ ,Ì,©,ðŒ^'è,µ,Ü,·[]B,½,Æ,¦,Î[]A[]u"®•¨[]v,Æ,¢,¤fJf^f[]fO,ª, ,é[]ê[]‡[]A<¤'Ê,Ì"®•¨fOf<[[fv,ð[]à-¾,·,éfJfefSfŠ[]i'¹—Þ[]A"L[]AŒ¢[]A,Ë,\_,Ý,È,Ç[]j,ð[]Ý'è,Å,«,Ü,·[]B

## **□V,μ,¢fJfefSfŠ,ð**□ì□¬,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,∙□B

- <u>[f]fefSfŠ]f□fjf...□[</u>, ©, ç[□V<KfJfefSfŠ,ð□ì□¬],ð'I'ð,µ,Ü,·□B</li>
   [f]fefSfŠ],Æ,¢,¤-¼'O,Ì□V,µ,¢fJfefSfŠ,ª<'2•\Žļ,³,ê,Ü,·□B</li>
- □V,μ,¢fJfefSfŠ-¼,ð"ü—ĺ,μ□AENTERfL□[,ð‰Ÿ,μ,Ü,·□B□Å'å125•¶Žš□i ‰pŒê,Å255•¶Žš□j,ÌJfefSfŠ-¼,ð•t,⁻,é,±,Æ,ª,Å,«,Ü,·□B □V,μ,¢fJfefSfŠ-¼,ª"o<sup>^</sup>,³,ê,Ü,·□B
- $3. \quad \bullet K v, \grave{E} f J f e f S f \check{S}, \eth, \cdot, \times, \ddot{A} \Box \grave{\Box} \Box \neg, \cdot, \acute{e}, \ddot{U}, \mathring{A} \Box A \check{Z} \grave{e} \Box \ddagger 1, \ddot{}, æ, \tilde{N} 2, \eth E J, \grave{e} \bullet \hat{O}, \mu, \ddot{U}, \cdot \Box B$

## fTfufJfefSfŠ,ð[]ì[]¬,·,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

- <u>[f]fefSfŠ]f□fjf...□[</u>, ©, ç[fTfuf]fefSfŠ,ð□ì□¬],ð'I'ð, μ,Ü, ·□B
   [f]fefSfŠ],Æ, ¢, ¤-¼'O,Ì□V, µ, ¢f]fefSfŠ,ª<'2•\ަ,³,ê,Ü, ·□B</li>
- □V,μ,¢JJfefSfŠ-¼,ð"ü—ĺ,μ□AENTERfL□[,ð‰Ÿ,μ,Ü,·□B□Å'å125•¶Žš□i ‰pœê,Å255•¶Žš□j,ÌJJfefSfŠ-¼,ð•t,⁻,é,±,Æ,ª,Å,«,Ü,·□B
- $3. \quad \bullet K v, \grave{E} f J f e f S f \check{S}, \delta, \cdot, \times, \ddot{A} \Box \grave{\Box} \Box \neg, \cdot, \acute{e}, \ddot{U}, \mathring{A} \Box A \check{Z} \grave{e} \Box \ddagger 1, \ddot{}, æ, \tilde{N}2, \delta \textcircled{E} J, \grave{e} \bullet \hat{O}, \mu, \ddot{U}, \cdot \Box B$
- 4.

ŽŸ,É□A□V,μ,¢fJfefSfŠ,ð"K□Ø,È□ê□Š,É"z'u,μ,Ü,·□BfJfefSfŠ,ð^Ú"®,·,é,É,Í□A,»,ÌfJfefSfŠ,ð'l'ð,μ, Ä□A"K□Ø,È□u□e□vfJfefSfŠ,Ü,Åfhf‰fbfO,μ,Ü,·□B

• i[]",  $ifJfefSfŠ, \delta'I'\delta, \cdot, \acute{e}, \acute{E}, iCtrlfL[[, \delta]A^ê^A, ifJfefSfŠ, \delta'I'\delta, \cdot, \acute{e}, \acute{E}, i[ASHIFTfL[], \delta % ", \mu, \acute{E}, <sup>a</sup>, c[A" i^i, i]A[]%, ifJfefSfŠ, Æ[]Å@ã, ifJfefSfŠ, \deltafnfCf%fCfg, \mu, Ü, ·]B$ 

{button ,AL(`catalog',0,`',`')} <u>ŠÖ<sup>~</sup>A $\square \in -\hat{U}$ </u>

# <sup>ֈ</sup> ʃhf‰fbfO□•fhf□fbfv,ðŽg—p,μ,½fJf^f□fO

Cumulus,Å,Í $\Box$ AWindows,ÌfGfNfXfvf $\Box$ [[f‰, ,Ü,½,ÍfffXfNfgfbfv,©,çf]f^fGFGffffff,Čf(,Ü,½,ÍftfHf<f\_'S'Ì),ðfhf <u>‰fbfO&fhf</u>ffbfv,µ,Ä $\Box$ Aftf@fCf<,ðfJf^fGO,·,é,±,Æ,ª,Å,«,Ü,· $\Box$ B

### fhf‰fbfO&fhf□fbfv,É,æ,èftf@fCf<,ðfJf^f□fO,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

- 1. <u>Cumulus,ð<N"®,µ□AfJf^f□fO,ðŠJ,«,Ü,·</u>.□B
- 2. Windows,ÌfGfNfXfvf $\Box$ [f‰,ð<N"@, $\mu$ ,Ü,· $\Box$ B
- fEfBf"fhfE,<sup>a</sup>Ω,â,·,¢,æ,¤
   ,É□ACumulusfAfvfŠfP□[fVf‡f"fEfBf"fhfE,¨,æ,ÑWindows,ÌfGfNfXfvf□□[f‰,ÌfTfCfY,¨,æ,Ñ"z'u,ð'<sup>2</sup>□®,µ,Ü,·□B
- 4. Windows,  $fGfNfXfvf = [f, A, A] ff = fO, ., eftf@fCf <, \delta''A'e, \mu, U, . B$
- 5. fJf^ff,  $\dot{f}$ ,  $\dot{f}$ ,
- 'l'ð,μ,½ftf@fCf<,Ü,½,ĺftfHf<f\_,ðCumulus,ÌfJf^f□fOfEfBf"fhfE,Éfhf ‰fbfO&fhf□fbfv,μ,Ü,·□B"Á'è,ÌfJfefSfŠ,ð•t,⁻,ÄfJf^f□fO,μ,½,¢□ê□‡,Í□A"o<sup>~</sup>^,μ,½,¢fJfefSfŠ-¼,Éfhf‰fbfO&fhf□fbfv,μ,Ü,·□B

ſJſ^ſ⊡ſO□ì‹Æ,ª□I—¹,੶,é,Æ□ACumulus,Ì∙\ަ,ĺ^ȉº,Ì,æ,¤,É,È,è,Ü,·□B

- $\label{eq:linear} \begin{array}{ll} & \Box & f \\ & \Box & f \\$

 $\underline{Cumulus,}^{\underline{a}\underline{Z}} \underline{Cumulus,}^{\underline{a}\underline{Z}} \underline{Cumuulus,}^{\underline{a}\underline{Z}} \underline{Cumuulus,}^{\underline{a}\underline{Z}} \underline{Cumuuus,}^{\underline{a}\underline{Z}} \underline{Cumuuus,}^{\underline{a}$ 

{button ,AL(`catalog',0,`',`')} <u>ŠÖ~A $\Box \in -\acute{U}$ </u>

# <sup></sup> [ʃJf^f□fO,∙,é]fRf}f"fh,ðŽg—p,μ,½fJf^f□fO

ftf@fCf<,ÌfJf^f□fO,Í□A[fJf^f□fO,∙,é]fRf}f"fh,ðŽg—p,μ,Ä□s,¤,±,Æ,à,Å,«,Ü,·□Bftf@fCf<,Ìf<u>hf</u> <u>‰fbfO&fhf□fbfv</u>,Æ"äŠr,∙,é,Æ□A2,Â,Ì□§ŒÀ,ª, ,è,Ü,·□B

Žè"®,Å<u>ftf@fCf<,ÉŠù'¶,ÌfJfefSfŠ,ð"o~^,·,é</u>,±,Æ,ª,Å,«,È,¢[]B

ffftfHf<fg,Å,Í□Aftf@fCf<,ðfJf^f□fO,·,é□Û,É□AflfŠfWfif<ftf@fCf<,ÌfpfX,ð"½ ‰f,μ,½<u>f]fefSfŠ,ªŽ©"®"I,É□ì□¬</u>,³,ê,Ü,·□B

ftf@fCf<,ð[]æ,É[]®—[],µ,Ä,¨,,Æ[]A1‰ñ,ÌŽè[]‡,ÅŠÈ'P,É<u>fŒfR[][fh,ÆfJfefSfŠ,ð"<sup>~</sup>Žž,É[]ì[]¬</u>,·,é,± ,Æ,ª,Å,«,Ü,·[]B

#### [fJf^f□fO,·,é]fRf}f"fh,ðŽg—p,μ,Ä□V,μ,¢fŒfR□[fh,ð□ì□¬,·,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢ ,Ü,·□B

- 1. <u>Cumulus,ð<N"®,µ□AfJf^f□fO,ðŠJ,«,Ü,·□B</u>
- [ftf@fCf<]f□fjf...□[,©,ç[f]f^f□fO,·,é],ð'l'ð,µ,Ü,·□B</li>
   [f]f^f□fO,·,é]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B
- $3. \quad [ftf@fCf<, \dot{l}] \hat{e}[] \check{S}]f{fbfNfX, \dot{A}]AfJf^f]fO, \cdot, \acute{e}ftf@fCf<, \check{\sigma}``\dot{A}`\dot{e}, \mu, \ddot{U}, \cdot]B$
- 4. ftf@fCf<,δ1,Â, ,ÂfJf^f□fO,·,é,©□AftfHf<f\_,Ì"à—e,ð,Ü,Æ,ß,ÄfJf^f□fO,·,é,±,Æ,ª,Å,«,Ü,·□B</li>
   □E ftf@fCf<,δ1,Â, ,ÂfJf^f□fO,·,é,É,Í□AŠeftf@fCf<,δfNfŠfbfN,µ,Ä[ŠJ,],δfNfŠfbfN,µ,Ü,·□B</li>
  - □E ftfHf‹f\_,Ì"à e,ð,Ü,Æ,ß,ÄfJf^f□fO,·,é,É,Í□A[ftf@fCf‹,Ì□ê□Š]ftfB□[f‹fh,Å,»,ÌftfHf‹f\_,ð,·,×,ÄfNfŠfbfN,μ□A[ ,·,×,Ä,ðfJf^f□fO],ðfNfŠfbfN,μ,Ü,·□B

fJf^f□fO,ª□I—¹,·,é,Æ□ACumulus,Ì•\ަ,ĺ^ȉº,Ì,æ,¤,É,È,è,Ü,·□B

 $\label{eq:linear} \begin{array}{ll} & \Box flf \check{S} fWfif \langle ftf@fCf \langle , \dot{l}fpfX(\Box \hat{e} \Box \check{S}), \delta'' \overset{1}{\sim} & \& f, \mu, \overset{1}{\sim} \Box V, \mu, \pounds fJfefSf \check{S}, \overset{a}{\bullet} \setminus \check{Z} \\ & \downarrow, \overset{a}{\circ}, \hat{e}, \dot{e} \end{array}$ 

ffftfHf‹fg,Å,Í□ACumulus,ÍfŒfR□[fh–¼,ÌftfB□[f‹fh,Éftf@fCf‹– ¼,ð•t,⁻,Ü,·□BfŒfR□[fh□î•ñ(fŒfR□[fh-¼) ,Ì•ï□X,ÉŠÖ,·,é□Ú□×,Í□A□ufŒfR□[fhfvf□fpfefB,Ì•ï□X□v,ðŽQ□Æ,µ,Ä,,¾,³,¢□B

{button ,AL(`catalog',0,`',`')} <u>ŠÖ~A□€–Ú</u>

# ŴfJf^f□fO fJfefSfŠ,Ì∙Ò□W

 $fJJefSfŠfXfgfEfBf"fhfE,Å,Í[]A^ȉ^{Q},Ì,æ,¤,È,±,Æ,ª,Å,«,Ü,·[]B$   $f@fR[][fh,ÉfJfefSfŠ,ð"o^{,.,\acute{e}}$   $fJfefSfŠ_1^{I},\bullet O[]W$   $IfJfefSfŠ_1f]fbfvfAfbfvf[]fjf...[L,ÌŽg_p]$   $fJfefSfŠ,Ì[f]f@fCfŠfAfX,\delta[]][\neg,.,\acute{e},\pm,Æ,ÅfJfefSfŠ,ÌfNf[]fXfŠftf@f@ff"fX,\delta[]][\neg,.,\acute{e}$   $\{button,AL(`catalog',0,`',`')\} \quad \underline{ŠO^{A}[] \in -\acute{U}}$ 

## IJfJf^f□fO IJfJfefSfŠ,Ì•Ò□W fŒfR□[fh,ÉfJfefSfŠ,ð"o~^,∙,é

<u>fŒfR□[fh</u>,É,Í•¡□",Ì<u>f]fefSfŠ</u>,ð"o<sup>~</sup>^,Å,«,Ü,·□B

## fŒfR[[fh,ÉfJfefSfŠ,ð"o˜^,·,é,É,ĺ^ȉº,ÌŽè[],É[],¢,Ü,·[]B

1. fŒfR□[fh,ð'l'ð,μ,Ü,·□B

• ;[]",ÌfŒfR[[fh,ð"<sup>-</sup>Žž,É'l'ð,·,é,É,Í[]ACTRLfL[][,ð‰Ÿ,µ,½,Ü,Ü'l'ð,µ,Ü,·[]B<sup>~</sup>A'±, $\mu$ ,½fŒfR[[fh,ð'l'ð,·,é,É,Í[]ASHIFTfL[][,ð‰Ÿ,µ,½,Ü,Ü'l'ð,µ,Ü,·[]B

2. 'l'ð,µ,½fŒfR□[fh,ð"o<sup>~</sup>,µ,½,¢<sup>°</sup>ê,Â,ÌfJfefSfŠ-¼,É<u>fhf‰fbfO&fhf□fbfv</u>,µ,Ü,·□B {button ,AL(`catalog',0,`',`')} <u>ŠÖ<sup>~</sup>A□€-Ú</u>

## ŴfJf^f□fO ŴfJfefSfŠ,Ì•Ò□W fJfefSfŠ-¼,Ì•Ò□W

f]fefSfŠ-¼,ð•Ò□W,·,é,É,Í□AfJfefSfŠ-¼,ðfNfŠfbfN,μ,Ä"½"],³,¹□A□V,μ,¢-¼'O,ð"ü— Í,μ,Ü,·□B[•Ò□W]f□fjf...□[,ÌflfvfVf‡f"([Žæ,è□Á,μ]□A[fJfbfg]□A[fy□[fXfg]□A[□í□œ]□A[,·,×,Ä,ð'l'ð]) ,Ü,½,Í<u>[fJfefSfŠ]f[fbfvfAfbfvf□fjf...□[</u>,ðŽg—p,μ,ÄfJfefSfŠ-¼,ð•Ò□W,·,é,±,Æ,à,Å,«,Ü,·□B

{button ,AL(`catalog',0,`',`')} <u>ŠÖ~A $\Box \in -\acute{U}$ </u>

## <sup>₩</sup>fJf^f□fO ₩fJfefSfŠ,Ì•Ò□W [fJfefSfŠ]f|fbfvfAfbfvf□fjf...□[,ÌŽg—p

fJfefSfŠf|fbfvfAfbfvf□fjf...□[,É,Í□A^ȉº,ÌfIfvfVf‡f",Ö,ÌfVf‡□[fgfJfbfg,ª, ,è,Ü,·□B

<b>fRf}f"fh</b> flfŠfWfif<,ð∙\ަ	$\label{eq:a-34} \begin{split} & [] a-34 \\ fGfCfŠfAfX, & (I'ð, 3, ê, Ä, ¢, é] ê] + [] A, ± , ] flfvfVf + f'', ð' (I'ð, ·, é, Æ] AflfŠfWfif < f] fef SfŠ, &                                   $	
fGfCfŠfAfX,ð∙\ަ	$\label{eq:constraint} \begin{array}{l} ``l`\delta,\mu, \frac{1}{2}f]fefSfŠ, \acute{E}fGfCfŠfAfX, ^{a}, \ ,\acute{e}\square \acute{e}\square \\ \ddagger \square A, \pm \\ , iflfvfVf \ddagger ", \delta`l'\delta, \cdot, \acute{e}, \pounds, \rangle, ifGfCfŠfAfX, ^{a} \\ \bullet \Label{eq:constraint} \begin{array}{l} \bullet \\ Label{eq:constraint} \end{array}$	
ſJfefSfŠ,ÅŒŸ <u>□</u> õ	ʻl'ð,µ,½fJfefSfŠ,ª"o~^,³,ê,½,·,×,Ä,Ìf ŒfR∏[fh,ð∙\ަ,µ,Ü,·∏B	
<u>ŠY"–ftf@fCf&lt;,ðfRfs∏[</u>	ʻl'ð,μ,½fJfefSfŠ,ðŽ□,ÂfŒfR□[fh,ÌflfŠf Wfif <ftf@fcf<,ðžw'è,³,ê,½□ê□š,éfrfs □[,μ,Ü,·□B</ftf@fcf<,ðžw'è,³,ê,½□ê□š,éfrfs 	
ŠK'w∙\ަ,∙,é	ʻl'ð,μ,½fJfefSfŠ,ÌŠK'w□\'¢,ð∙\ ަ,μ,Ü,·□B	
ŠK'w∙\ަ,µ,È,¢	Œ»□Ý'l'ð,³,ê,Ä,¢,éʃJʃefSfŠ,ÌŠK'w□\'¢ ,ð"ñ∙\ަ,É,µ,Ü,∙□B	
<u>□V‹KfJfefSfŠ,ð□ì□¬</u>	□V‹KfJfefSfŠ,ð□ì□¬,µ,Ü,·□B	
ſJfefSfŠ−¼,ðŒŸ□õ	fŠfXfg"à,ÌfJfefSfŠ,ðŒŸ∏õ,Å,«,Ü,∙∏B	
,∙,×,Ä,ðŠK'w∙\ަ,∙,é	,∙,×,Ä,ÌfJfefSfŠ,ÌŠK'w□\'¢,ð∙\ ަ,µ,Ü,·∐B	
,∙,×,Ä,ðŠK'w∙\ ަ,µ,È,¢	,∙,×,Ä,ÌfJfefSfŠ,ÌŠK'w□\'¢,ð"ñ∙\ ަ,É,µ,Ü,·□B	
[fJfefSfŠ]f fbfvfAfbfvf[]fjf[[,ð•\ަ,·,é,É,Í[A^ȉº,ÌŽè[]‡,É[],¢,Ü,·[]B		

1. fJfefSfŠ-¼,ð'l'ð,μ,Ü,·□B

‰Ef}fEfXf{f<sup>f</sup>,ðfNfŠfbfN,μ,Ü,·□B

{button ,AL(`catalog',0,`',`')} <u>ŠÖ~A□€–Ú</u>

## <sup>₩</sup>fJf^f□fO ₩fJfefSfŠ,Ì•Ò□W fJfefSfŠ,ÌfGfCfŠfAfX,Ì□ì□¬

fGfCfŠfAfX,ÆŒÄ,Î,ê,é

<sup>¯</sup>‰¯¼́'zƒŇƒ́⊡fXfŠftf@fŒf"fX,ÌfJfefSfŠ,ð□ì□¬,Å,«,Ü,·□BfGfCfŠfAfX,Í□A,»,ÌftfHf‹f\_fAfCfRf""à,É– î^ó,ª•\ަ,³,ê,Ä,¢,Ü,·□B

fJJfefSfŠ,ÌfGfCfŠfAfX,ðŽg—p,µ,Ä[]AfJJfefSfŠ,ð'ŠŒÝ,ÉŠÖ~A•t,¯,é,± ,Æ,ª,Å,«,Ü,·[]B,½,Æ,¦,Î[]A[]u[]©'Ž[]v,Æ[]u[]H•``[]v,Æ,¢,¤2,Â,ÌfJfefSfŠ,ª, ,é[]ê[]‡,ð[]l,¦,Ü,·[]B[]u[]H•``[] v,Æ,¢,¤fJfefSfŠ,É,Í[]A[]u-l-``[]v,Æ,¢,¤fTfufJfefSfŠ,ªŠÜ,Ü,ê,Ä,¢,Ü,·[]B[]u[]©'Ž[]v,Æ,¢ ,¤fJfefSfŠ,É,Í[]A[]uf~fcfof` []v,Æ,¢,¤fTfufJfefSfŠ,ªŠÜ,Ü,ê,Ä,¢ ,Ü,·[]BfJfefSfŠ,ÌfGfCfŠfAfX,ð[]][]¬,·,é,±,Æ,Å[]A[]uf~fcfof` []v,Æ[]u-l-``[]v,ÌŠÔ,É ‰¼'z''I,ÈfNf[]fXfŠftf@fŒf"fX,ð[]][]¬,·,é,±,Æ,ª,Å,«,Ü,·[]B.

□H•" □©'Ž
-I-" f~fcfof`
fJfefSfŠ,ÌfGfCfŠfAfX- fJfefSfŠ,ÌfGfCfŠfAfX--I-"
f~fcfof`

,±,Ì,æ,¤,ÈfNf□fXfŠftf@fŒf"fX,ð□ì□¬,·,é,Æ□AfJfefSfŠ□u−I−¨□v,ÅŒŸ□õ,·,é,¾,¯,Å□u−I− ¨□v,Æ□uf~fcfof`□v,Ì—

¼•û,ÌfŒ́fR⊡[́fh,ðŒŸ□õ,Å,«,Ü,·□BfGfCfŠfAfX,ðŠÜ,ß,½fJfefSfŠŒŸ□õ,ð□s,¤/□s,í,È,¢ ,Í□A<u>fGfCfŠfAfX,ðŒŸ□õ</u>,Å□Ý'è,Å,«,Ü,·□B

#### fJfefSfŠ,ÌfGfCfŠfAfX,ð□ì□¬,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

- 1. fJfefSfŠfXfgfEfBf"fhfE, $A\square AfGfCfŠfAfX, \delta\square \square \neg, \mu, \frac{1}{2}, \notin JJfefSfŠ, \delta'I'\delta, \mu, Ü, \cdot \square B$
- <u>[f]fefSfŠ]f□fjf...□[</u>, ©, ç[fGfCfŠfAfX,ð□ì□¬],ð'l'ð,µ,Ü,·□B
   f]fefSfŠ,ÌfGfCfŠfAfX,ª•\ަ,³,ê,Ü,·□Bf]fefSfŠ,ÌfGfCfŠfAfX,ÌftfHf‹f\_fAfCfRf",É,Í□A□¬,³,Èî^ó‹L□†,ª•\ަ,³,ê,Ü,·□B
- JJfefSfŠ,ÌfGfCfŠfAfX,ðŠY"−,·,é□ê□Š,Ü,Åfhf‰fbfO,µ,Ü,·□B

{button ,AL(`catalog',0,`',`')}  $\underline{SO^{A} \subseteq -U}$ 

## <sup>₩</sup>fJf^f□fO ₩fJfefSfŠ,Ì•Ò□W fJfefSfŠ,Ì□í□œ

fJJfefSfŠftfHf<f\_,<sup>a</sup>•s—v,É,È,Á,½,Æ,«,Í[]A,»,ÌJJfefSfŠ,ð[]í[]œ,·,é,±,Æ,ª,Å,«,Ü,·[]B<u>Ž©"®"I,É[]\]¬,µ,½JJfefSfŠ</u>,<sup>a</sup>•s—v,É,È,Á,½[]ê[]‡,Å,à^ȉ<sup>o</sup>,Ì3,Â,Ì•û-@,Åftf@fCf<,Ì[]ê[]Š,ð"Á'è,Å,«,Ü,·[]B

- $\label{eq:constraint} \begin{array}{ll} & \label{eq:constraint} & \label{constraint} & \label{eq:constraint} & \$
- $\label{eq:constraint} \begin{array}{l} \blacksquare E & \underline{[\underline{C}\underline{Y}]} \\ \hline & \underline{\delta}fc \\ \hline & \underline{$

## fJfefSfŠ,ð□í□œ,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

- <u>[f]fefSfŠ]f□fjf...□[</u>, ©, ç[f]fefSfŠ,ð□í□œ],ð'I'ð,μ,Ü,·□B
   '€□ì,ðŠm"F,·,é,½,ß,Ìf\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B
- 3. [OK], $\ddot{U}$ , $\frac{1}{2}$ , $\dot{I}$ [fLfff"fZf<], $\delta$ fNfŠfbfN, $\mu$ , $\ddot{U}$ , $\cdot$

{button ,AL(`catalog',0,`',`')} <u>ŠÖ~A $\Box \in -\acute{U}$ </u>

# <sup></sup>∭fJf^f□fO fŒfR□[fh□î•ñ,Ì□X□V

flfŠfWfif<ftf@fCf<, ÉfAfNfZfX, Å, «, é[]ê[]‡, Í[]AŠù'¶, ÌfŒfR[][fh,ð[]X[]V, ·, é, ± ,Æ,Å[]AflfŠfWfif<Ž©[]g, ÌŽ[], ÂfŒfR[][fh[]î•ñ(fTf€flfCf<[]A‰ð'œ"x[]AfTfCfY,È,Ç),ð•Ï[]X, ·, é, ± ,Æ,ª,Å, «,Ü, ·]]BfŒfR[][fh,ð[]X[]V, ·, é,Æ[]Aftf@fCf<,ª•Ï[]X, ³, ê,Ä,¢ ,é[]ê[]‡, Í[]AfTf€flfCf<,ª[]Ä"x[]ì[]¬, ³, ê<u>[]A[fŒfR][[fhfvf][fpfefB]fEfBf"fhfE</u>,É•\ަ,³,ê,é,± ,ê,ç,Ì[]î•ñ,ª, ·, ×,Ä[]X[]V, ³,ê,Ü, ·]]B

## Šù'¶,ÌfŒfR[[[fh,Ì[]î•ñ,ð[]X[]V,·,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

- $1. \hspace{0.1cm} f \hspace{-0.1cm} \int f$
- 2. [fŒfR□[fh]f□fjf...□[,©,ç[□X□V],ð'l'ð,μ,Ü,·□B
- 3. fTfuf□fjf...□[,©,ç<u>[<□§□X□V]</u>,ð'l'ð,μ,Ü,·□B

{button ,AL(`catalog',0,`',`')} <u>ŠÖ<sup>~</sup>A $\square \in -\acute{U}$ </u>

## **Cumulus Browser**

CumulusBrowser,Í[AfOf

[[[]AfRfs[][[]A^Ú"®[]A'[]Žß[]AfA[][f]fCfu,Å,«,é,½,ß[]AfffWf^f<,È,ç,Ñ,Éf[]fffBfA,Ìfvf[],Ìfj[][fY,É,à ‰ž,¦,é,±,Æ,ª,Å,«,Ü,·[]B,Â,Ü,è[]A[]î•ñ,ÌŠÇ—[],â[]§Œä,ð'Ê,¶,ÄfffWf^f<fs[]fffBfA,ðf[]fffBfAŽ′ŽY,É•Ï ‰»,³,¹,é,Ì,Å,·[]B,Ü,½[]Aftf@fCf<,ðŒø—¦—Ç,'Ç[]Õ[]A"z'u[]AŒŸ[]õ,·,é,±

,Æ,Å□AfNflfŠfēfB,ÌŒü̈□ā̈́,ð̈́,ĺ́,¶,ßf□□[fNftḟ□□ľ,̉üʻP,ðŽÀ̄Œ̃»,Å,«,é,Ì,Å□AŒÂ□X,Ìf†□[fU,¾, ¯,Å,È,-□AŠé‹Æ'S'Ì,Ì‹M□d,ÈŽžŠÔ,â″ï—p,ð□팸,・,éfc□[f‹,Å,à, ,è,Ü,·□B

•s-¾,È—pŒê,É,Â,¢,Ä,Í[]A<u>—pŒê[]W</u>,ðŽQ[]Æ,μ,Ä,,¾,³,¢[]B

^ȉ⁰,ÌfgfsfbfN,Å□ACumulus ,ÌŠT—v,ð□à-¾,μ,Ü,·□B

- <u>Cumulus, Ì, μ, , Ý</u>
- □ <u>flf"f‰fCf"fwf<fv,ÌŽg—p</u>
- □ <u>fEfBf"fhfEf□fjf…□[fRf}f"fh,ÌŽg—p</u>
- □ <u>fefNfifJf<fTf|□[fg</u>
- $\Box \quad \underline{\langle \underline{x}'\hat{E}f^{f}XfN, \hat{I}ZQ} \Box \underline{\mathcal{A}} \Box \underline{\mathcal{A}}$

## Cumulus Browser Cumulus,Ì,μ,,Ύ

 $fOf\%ftfBfbfNfX[]A[]o"Å[]A, ", æ, Ñf}f<f`f[]fffBfAŽY<Æ,É, ", ¢, Ä, Í[]AfCf[][][fW[]AfOf %ftfBfbfN[]Afy[][fWf@fCfAfEfg[]AfTfEf"fh[]A, ", æ, Ñfrffflftf@fCf<,È, Ç[]AŽ–ŽÀ[]ã, ,ç,ä,éf^fCfv,Ìfff Wf^f<ftf@fCf<,<u>ªflfŠfWfif<ftf@fCf<</u>,Æ,È,è"¾,Ü,·[]BCumulus,Å,Í[]AfIfŠfWfif<ftf@fCf<,ð$  $e^Õ,É•Ò[]¬,µ[]AfAfNfZfX,Å,«,Ü,·[]B,Í,¶,ß,É•K—v,È,Ì,Í[]AŠî-{ŠT"O,ð,¢,,Â,©—[]‰ð,µ,Ä,",,±,Æ,¾,<sup>-</sup>,Å,·[]B$ 

Cumulus,ĺ[]A<u>f]f^f[]f</u>O,ÆŒÄ,Î,ê,éftf@fCf<"à,ÅfIfŠfWfif<ftf@fCf<,ð'Ç[]Õ,µ,Ü,·[]BfIfŠfWfif<ftf@fCf<,ðf Jf^f[]fO,·,é,Æ[]A<u>fŒfR[][fh</u>,ÆŒÄ,Î,ê,éfJf^f[]fOfGf"fgfŠ,ª[]ì[]¬,³,ê,Ü,·[]BfŒfR[][fh,ÌŒŸ[]õ,ð e^Õ,É,·,é,½,ß[]ACumulus,Å,ĺfŒfR[][fh,ð<u>f]]fefSfŠ</u>,ÆŒÄ,Î,ê,é~\_—[]fOf<[][fv,É•Ò[]¬,¨,æ,Ñ•ª— Þ,µ,Ü,·[]B

fŒfR[[fh,ªf]f^f[]fO,³,ê,é,Æ[]AŠefŒfR[][fh,ð<u>fTf€flfCf<</u>,ÆŒÄ,Î,ê,é[]¬,³,È ‰æ'œ,Ü,½,ĺfefLfXfg,ÌfŠfXfg,Æ,µ,Ä•\ަ,Å,«,Ü,·[]BfŒfR[][fh,ÍCumulus"à,ÅŒŸ[]õ,³,ê[]A'T,µ,Ä,¢ ,½fŒfR[][fh,ªŒ©,Â,©,Á,½,ç[]A,»,ÌflfŠfWfif<ftf@fCf<,ðfvfŒfrf... ][[]AfRfs[][]A,Ü,½,Í[]V,µ,¢[]ê[]Š,É^Ú"®,·,é,±,Æ,ª,Å,«,Ü,·[]B

,»,Ìʻ¼,É□»•i"Å,ÌDesktop Plus,É,ĺŽŸ,Ì,æ,¤,È—<sup>~</sup>"\_,ª, ,è,Ü,·□B

- I Microsoft, Ì Visual Basic, Ü,½, ĺ,», Ì'¼, ̨OLE□€<'fvf□fOf‰f~f"fOfc□[f<,ðŽg,Á,Ä□AŠî-{fvf□fOf ‰f€<@"\,ðŽ©"®‰», ·,é,±,Æ,ª,Å,«,Ü,·□B</p>
- I <u>Cumulus Browser</u>,ðŽg,Á,Ä□AfJf^f□fO,ðCD-ROM,Ü,½,ĺ,»,Ì<sup>1</sup>/4,ÌfŠf€□[fofuf<f□fffBfA□iSyquest□AJaz□AZip□A,Ü,½,ÍMOfJ□[fgfŠfbfW,È,Ç□j,Å" z•z,·,é,±,Æ,ª,Å,«,Ü,·□B
- □ <u>Cumulus Internet Media Server</u>,ðŽg,Á,Ä□AfJf^f□fO,ðfCf"f^□[flfbfg,Å<¤—L,¨,æ,Ñ"z•z,·,é,±,Æ,ª,Å,«,Ü,·□B</p>

{button ,AL(`intro',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€–Ú</u>

## <sup>∭</sup>Cumulus Browser flf"f‰fCf"fwf<fv,ÌŽg—p

fwf‹fv,Ì□€–Ú,ðŽQ□Æ,·,é,É,Í□A[fwf‹fv]f□fjf…□[,©,ç[–ÚŽŸ],ð'l'ð,μ,Ü,·□Bfwf‹fv,Ì□€–Ú,ÌfŠfXfg,ª∙\ ަ,³,ê,Ü,·□B

,³,ç,É□A[www,Å□î•ñ,ðŒ©,é]f{f^f",ðfNfŠfbfN,·,é,Æ□AŠJ"Œ³,ÌCantoŽÐ,ÌWebfTfCfg,É□Ú'± ,μ,Ä□A□î•ñ,âf\ftfgfEfFfA,Ì□X□V,ðŽó,¯,é,±,Æ,ª,Å,«,Ü,·□B

–pŒê,ÉŠÖ,∙,éfwf‹fv,ð–LŒø,É,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,∙□B

- 1.  $\Box \hat{\bullet} \tilde{n}, \delta \bullet \langle \check{Z} |, \cdot, \acute{e}f I f v f V f \ddagger f", \delta f N f \check{S} f b f N, \mu, \ddot{U}, \cdot \Box B$
- F1,ð‰Ÿ,μ,Ü,·□B

{button ,AL(`intro',0,`',`')} <u>ŠÖ~A□€-Ú</u>

## <sup>∭</sup>Cumulus Browser fEfBf"fhfE,Ìf⊡fjf…□[fRf}f"fh,ÌŽg—p

fEfBf"fhfEf[]fjf...[[,ÌfRf}f"fh,ðŽg,Á,Ä[]ACumulus,ÅŠJ,¢,½fEfBf"fhfE,ð[]®—ñ,Å,«,Ü,·[]B

- □V< fAfNfefBfufEfBf"fhfE,Æ"⁻,¶"à—
- KfEf e,Å□V,μ,¢fEfBf"fhfE,ð•¡□"ŠJ,,±
- Bf"f ,Æ,ª,Å,«,Ü,⊡BCumulus hfE Browser,Ì"<sup>−</sup>Žž,ÉŠJ,,±
- hfE Browser,  $i^{(-)}Z$ ž, ÉŠJ,, ± ,Æ, Ì, Å, «, éfEfBf"fhfE, Ì□§ŒÀ, Í□A, ± , ÌfRf}f"fh,Å, ÍŠÖŒW, , è, Ü, ¹, ñ□B1,Â, Ìf EfBf"fhfE, Ì"à e,ð•Ï□X, ·, é, Æ□A"<sup>-</sup>, ¶ff□[f^,ðŠÜ,Þ'¼, Ì, ·,×,Ä, ÌfEfBf"fhfE,É•Ï□X,<sup>a</sup>"½ ‰f,<sup>3</sup>,ê, Ü, ·□B□V<KfEfBf"fhfE,ðŠJ,-,Æ□A, », ê, <sup>a</sup>fAfNfefBfufEfBf"fhfE,Æ,È, è□A'¼, ÌŠJ,¢,½fEfBf"fhfE,Ì□Å'O-Ê,É•\ ަ,<sup>3</sup>,ê, Ü, ·□B•¡□", ÌŠJ,¢,½fEfBf"fhfE,ð•\ ަ, ·, é,É,Í□AfEfBf"fhfEf□[fjf... □[,©,c[□d,Ê,Ä•\ަ],Ü,½,Í[•À,×,Ä•\ ަ]fRf}f"fh,ðŽg—p,µ,Ü,·□B
- fAfC f\_fCf"fEfBf"fhfE,̉º•",É\_A\_Å\_¬
- fRf" ‰»,³,ê,½fEfBf"fhfE,ÌfAfCfRf",ð□®—
- ,Ì□ ñ,μ,Ü, □Bf□fCf"fEfBf"fhfE,Ì
- $\mathbb{B}$   $\mathbb{W}^{2}$ ,  $\mathbf{\hat{i}}$   $\hat{\mathbf{u}}$ ,  $\mathbf{\hat{f}}$   $\mathbf{\hat{f}}$   $\mathbf{f}$   $\mathbf{f}$
- ñ ,Æ□AfAfĊſŔſ",ª,»,ÌfEfBſ"fhfE,̉º,É ‰B,ê,é,½,β□A^ê•",Ü,½,Í′S•",ÌfAfCf Rf",ªŒ©,¦,È,,È,é,±,Æ,ª, ,è,Ü,,⊡B
- $\begin{array}{ll} \square d, & \bullet_i \square'', \dot{I} \check{S} J, \varphi, \frac{1}{2} f E f B f'' f h f E, \dot{\delta} \square d, \ddot{E}, \ddot{A} \square \circledast \\ \ddot{E}, \ddot{A} & \tilde{n}, \mu, \ddot{U}, \cdot \square B \end{array}$
- •\ަ
- •À, •¡[]",ÌŠJ,¢,½fEfBf"fhfE,ð[]d,È,ç,È,¢
- ×,Ä ,æ,¤,É]®—ñ,µ,Ü,·]B
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- •ªŠ fJfefSfŠfŠfXfgfEfBf"fhfE,ÆfŒfR□[fhfE
  - ĴBf"fhfĖ,ĺ<«ŠĒ⊡ü,ĺ^É́'u,ð" ®, ©,·,±́ ,Æ,ª,Å,«,Ü,·⊡B

## ©Cumulus Browser fefNfjfJf<fTf|□[fg

CumulusŠJ"Œ<sup>3</sup>Canto Software□A,<sup>¨</sup>,æ,ÑCanto Software"ú-{'ã—□"XfV□[fA□[f<fV□[fVfXfef€Š"Ž® ‰ïŽÐ,Å,Í□Af□fCf"fŠfefBftfŠ□[,Å"z•z,³,ê,éCumulus Browser,É'Î,·,éfTf| □[fg,Í^ê□Ø□s,È,Á,Ä,¨,è,Ü,¹,ñ□B

fvf□fOf‰f€,Ì,²Žg—p,¨,æ,Ñfgf‰fuf<,ÉŠÖ,∙,é,²Ž¿−â,ÉŠÖ,µ,Ä,Í[<u>fgf‰fuf<fVf...□[fefBf"fO</u>],Æ[<u>.²Ž¿−</u> <u>â,Ì'O,É</u>],ð,²ŽQ□Ɖº,³,¢□B

#### Cumulus Browser <¤′Êf^fXfN,ÌŽQ∏Æ∏æ

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#### ŽQ∏Æ∏æ

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Internet Media Server,É,Â,¢,ÄŠw∏K,∙,é

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{button ,AL(`intro',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€–Ú</u>

flf^f□f0□EflfvfVf‡f",Ì□Ý'è fAfvfŠfP[[fVf‡f"[]Ý'è, lf]fXf^f}fCfY

<u>fŒfR⊓[fhfXfe⊓[f^fX,ÌŽq—p</u>

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<u>Cumulus Browser, ÌŽq—p</u>

Cumulus Internet Media Server

flfŠfWfif<,ÌŠC—□

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# Cumulus,ÌŠÇ—[]

ŽŸ,Ì,±,Æ,ª,Å,«,Ü,∵∏B

- I <u>Cumulus, ift[[fU"o<sup>^</sup></u>
- □ <u>f]f^f□fO,Ì□ì□¬</u>
- $\Box = \underline{\Box V \langle KfJf^f ] fO, \delta \underline{\Box} \underline{\Box} \neg, \mu, \ddot{A} \check{S} J,}$
- I <u>fJf^f⊡fO,Ì′ljÁ</u>
- □ <u>f]f^f□f0□Ý'è,Ì•ï□X</u>
- I <u>fJf^f⊡fO,ÌfofbfNfAfbfv</u>
- I <u>fofbfNfAfbfv,µ,½fJf^f⊡fO,ÌfŠfXfgfA</u>
- $\Box \quad \underline{\square}(\underline{\square}\underline{\alpha},\underline{}^{3},\underline{\hat{e}},\underline{}^{1}\underline{/}_{2}f\underline{\Box}f\underline{R}\underline{\square}[fh,\underline{\hat{l}}\underline{\bullet}\underline{\alpha}\underline{S}^{\hat{-}}]$
- □ <u>f]f^f□fO,Ì^³□k</u>
- $\underbrace{\check{S}}{\underline{C}} = \underbrace{\check{S}}{\underline{C}} = \underbrace{\check{G}}{\hat{I}} \cdot \tilde{n}, \underbrace{\check{\delta}}{\hat{I}}, \underline{\mu}, \underbrace{\check{A}}{f} \underbrace{I}{f}^{f} = fO, \underbrace{\check{I}}{f} = fO, \underbrace{\check{\delta}}{\hat{I}} \cdot \underbrace{I}_{f} = fO, \underbrace{\check{\delta}}{f} = \underbrace{\check{I}}{f} \cdot \underbrace{I}_{f} = \underbrace{\check{I}}{f} \cdot \underbrace{I}_{f} = \underbrace{I}_{f} \cdot \underbrace{I}_$
- □ <u>f]f^f□fO,ÌfRfs□[</u>
- I <u>f]f^f□f0,Ì•ªŠ"</u>
- □ <u>f]f^f□f0,ÌŒ<</u>□‡
- □ <u>fJf^f□fO,ÌfA□[fJfCfu</u>
- □ <u>f]f^f□fO,Ì□C•œ</u>
- <u>Cumulus, ÌŽ©"®‰»</u>

Desktop Plus,Ü,½,Í□»•i"Å,ÌCumulus Network,ð,¨Ž□,¿,Ì□ê□‡,Í□AŽŸ,Ì'€□ì,à,Å,«,Ü,·□B

- [fjf^f\_f\_6,Ö,ÌfAfNfZfX]f\_fCfAf\_f0f{fbfNfX,ÌŽg\_p
- □ <u>fT□[fo,Ö,Ìf□fOfIf"</u>
- □ <u>fNf‰fCfAf"fg,Ì□Ú'±‰ð□œ</u>

 $-\hat{a}^{\dot{e}}, \hat{b}_{\dot{e}} = \hat{a}^{\dot{e}}, \hat$ 

{button ,AL(`administrator',0,`',`')}  $\underline{\check{SO}^{A} \square \underbrace{-\dot{U}}$ 

# ©Cumulus,ÌŠÇ—[] Cumulus,Ìft[[[fU"o<sup>~</sup>^

Cumulus Browser, Í $\Box$ Af $\Box$ fCf,,fŠfefBftfŠ $\Box$ [,Ìfvf $\Box$ fOf‰f€,Å,· $\Box$ BCumulus Browser,»,Ì,à,Ì,Ìf† $\Box$ [fU"o<sup>~</sup>^,ð $\Box$ s,¤•K—v,Í, ,è,Ü,¹,ñ $\Box$ B {button ,AL(`administrator',0,`',`')} <u>ŠÖ<sup>~</sup>A $\Box$ €-Ú</u>

# <sup>[]</sup>Cumulus,ÌŠÇ—[] fJf^f⊡fO,Ì[]ì[]¬

 $fJf^f[]fO,\dot{l}[]\dot{u}]\neg, \acute{E}\bullet K-v, \grave{E}fXfefbfv, \acute{I}^\grave{E} & \circ, \grave{I}, \mathcal{A}, \ddot{\cdot}, \grave{e}, \mathring{A}, \cdot []B$ 

- 1. [f]f^f $[0,0,h]fAfNfZfX]f_fCfAf[fOf{fbfNfX,}[0VK],\deltafNfŠfbfN,\mu,Ä,,,,,,,,,,,]g] [f]f^f<math>[0,0,h]fAfNfZfX]f_fCfAf[fOf{fbfNfX,}]$
- $2. [fpfX-\frac{1}{4}]ftfB[[f<fh, \acute{f}]f^{f}]fO, \\ \delta \bullet \hat{U}`\P, \cdot, \acute{e}fffBf\ ffNfgf\ \check{S}-\frac{1}{4}, \\ \delta````u-\acute{I}, \mu, \ddot{A}, , \\ \overset{3}{4}, \\ \overset{3}{4},$
- 3. [f]f^f $d^{-\frac{1}{4}}$ ftfB $[f^{fh}, E^{Aflfv}fVf^{f}, i]f^{f}d^{-\frac{1}{4}}, \delta^{(i)}u^{-\frac{1}{4}}, a^{3}, a^{3}, a^{2}]$

ftf@fCf<,Ì–¼□Ì,ªŠo,¦,É,,¢□ê□‡,â□AŽg—p,µ,Ä,¢,éOS,Ì–½–¼<K'¥ ,ªŒµ,µ,¢□ê□‡,Í□A•Ê□Ì,Æ,µ,ÄfJf^f□fO-¼,ðŠ,,,è"–,Ä,Ä,¨,,ƕ֗˜,Å,·□B

4. [OK],ðfNfŠfbfN,μ,Ä,,¾,3,¢∏B

ŽŸ,Ì'€∐ì,à□s,¤,±,Æ,ª,Å,«,Ü,·□B

- □ <u>f]f^f□fO,Ì□\□¬</u>
- $\ \ \int \underline{fAfvf} \underline{SfP}[\underline{fVf}] \underline{f'} \underline{O}' \underline{\dot{v}}, \underline{\dot{f}}] \underline{fXf^{f}} \underline{fCfY}$
- □ <u>fJf^f□fOfIfvfVf‡f",Ì□Ý'è</u>

 $\check{Z}\ddot{Y}, \dot{I}, \boldsymbol{\varpi}, \mathtt{x}, \check{E} [ \acute{O} < \mu, \overset{a}{=} [ \P, \mu, \overset{1}{\sim} ] \hat{e} [ \ddagger, \acute{E}, \acute{I} [ \square A \bullet_{i} [ \square ", i f] f^{f} [ fO, \delta [ ] i [ \neg , \cdot, \acute{e}, \pm, \mathcal{A}, \overset{a}{=}, \mathring{A}, «, \ddot{U}, \cdot ] B$ 

- I fJf^fDfOftf@fCf‹fTfCfY,ª'å,«,,È,è,·,¬,½DêD‡DBCumulusfJf^fDfO,ÌfTfCfY,ÍDÅ'å2 GB,ÉD§ŒÀ,³,ê,Ä,¢,Ü,·DB‹--e,³,ê,éfŒfR[[fhD",ÍDAfTf€flfCf‹,Ì•iŽ¿/fTfCfYDÝ'è,È,ç,Ñ,ÉŠefŒfR D[fh"à,ÌfefLfXfg—ÊDi,½,Æ,¦,Î[fm[[fg]ftfB[[f‹fhDj,ÉŠî,Ã,¢,ÄŒ^'è,³,ê,Ü,·DB

{button ,AL(`administrator',0,`',`')}  $\underline{\check{SO}^{-}A_{\Box} \in -\acute{U}}$ 

# <sup>[</sup>[] [V≺KfJf^f⊡fO,ð[]ì[]¬,μ,ÄŠJ,

 $ftf@fCf \langle f \Box f j f ... \Box [, \hat{I} [ \Box V \langle K ] f R f \} f"fh, \delta \mathring{Z}g, \hat{A}, \ddot{A} \Box A \Box V \langle K f J f \uparrow f \Box f O f t f @f C f \langle , \delta \Box \hat{\Box} \Box \neg , \mu, \ddot{A} \check{S} J, , \pm , \mathcal{A}, \overset{a}{\ast}, \mathring{A}, \overset{a}{\ast}, \ddot{U}, \cdot \Box B \Box V \langle K f J f \uparrow f \Box f O, \delta \Box \hat{\Box} \Box \neg , \mu, \ddot{A} \check{S} J, , \acute{E}, \acute{I}$ 

- $1. \quad ftf@fCf < f[]fjf...[[, ©, c[[]V < K], ð'l'ð, \mu, Ü, \cdot]]B$
- $2. [ftf@fCf <-\frac{1}{4}]ftfB[[f < fh, É]V < Kf]f^f]fO -\frac{1}{4}, \\ \delta'' \ddot{u} \dot{I}, \mu, \ddot{A} [A[\bullet \hat{U}'\P], \delta fNf \check{S} fbfN, \mu, \ddot{U}, \cdot ]B$

# <sup>[]</sup>Cumulus,ÌŠÇ—[] [fJf^f□fO,Ö,ÌfAfNfZfX]f\_fCfAf□fOf{fbfNfX,ÌŽg—p

[f]f^f□fO,Ö,ÌfAfNfZfX]f\_fCfAf□fOf{fbfNfX,ĺ□A,³,Ü,´,Ü,ÈŠÇ— □f^fXfN,ÌŠJŽn"\_,Å,·□B[f]f^f□fO,Ö,ÌfAfNfZfX]f\_fCfAf□fOf{fbfNfX,É,Í□AŽŸ,ÌfIfvfVf‡f",ª, ,è,Ü,·□B

ŠJ,	Šù'¶,ÌfJf^f[]fOftf@fCf‹,ðŠJ,«,Ü,·[]BCumulus ŠÇ—[]ŽÒ,Æ,µ,ÄfJf^f[]fO,ðŠJ,©,È,¢ ,Æ[]AfJf^f[]fO,Ì[] ‰Šú[]Ý'è,Ì•Ï[]X,ðŠJŽn,Å,«,Ü,¹,ñ[]B
∏V <k< td=""><td>□V‹KfJf^f□fOftf@fCf‹,ð□ì□¬,µ,Ü,·□B</td></k<>	□V‹KfJf^f□fOftf@fCf‹,ð□ì□¬,µ,Ü,·□B
'ljÁ	fJf^f□fO,ð□A[fJf^f□fO,Ö,ÌfAfNfZfX]f_fCfAf□fO f{fbfNfX,É•\ަ,³,ê,éfŠfXfg,ɒljÁ,µ,Ü,·□BfNf ‰fCfAf"fg,ªfJf^f□fO,ð<¤—L,Å,«,é,æ,¤ ,É,·,é,É,Í□A[fJf^f□fO,ð<¤—L,·,é],ð— LŒø,É,µ,Ü,·□B
[]í]œ	fŠfXfg,©,çfJf^f[]fO,ð[]í[]œ,µ,Ü,·[]B,± ,ÌŽž"_,ÅfNf‰fCfAf"fg,ªfJf^f[]fO,É[]Ú'±,µ,Ä,¢ ,é[]ê[]‡,Í[]A[ <u>fNf‰fCfAf"fg,Ì[]Ú'±</u> <u>‰ð[]œ]</u> f_fCfAf[]fOf{fbfNfX,ª•\ަ,³,ê,Ü,·[]B
fŠfXfgfA	fJf^f⊡fO,ÌfofbfNfAfbf∨fRfs□[,ðŠJ,«□AfJf^f□fOf tf@fCf<,Æ,μ,Ä∙œŠ^,³,¹,Ü,·□B
ʻl'ðfJf^f⊡fO,Ì □Ý'è□FfJf^f⊡f O,ð‹¤—L,∙,é	,±,Ì□€–Ú,ðf`fFfbfN,∙,é,Æ□ACumulus Client,ªʃJf^f□fO,ð‹¤—L,Å,«,é,æ,¤ ,É,È,è,Ü,·□B□Ú□×,É,Â,¢ ,Ä,Í□A[ <u>□V‹KfJf^f□fO,ðWindows</u> <u>Client,©,ç□ì□¬,∙,é]</u> ,ðŽQ□Æ,µ,Ä,,¾,,4□B
ʻlʻðfJf^f⊡fO,Ì □Ý'è□FfJf^f⊡f O,ðWeb<¤— L,∙,é	,±,Ì□€- Ú,ðf`fFfbfN,·,é,Æ□AfJf^f□fO,ðfCf"f^□[flfbfg, Å"□M,·,é,±,Æ,ª,Å,«,Ü,·□B□Ú□×,É,Â,¢ ,Ä,Í□A[ <u>Cumulus Internet Media Server,ÌŽg—</u> ϼ],ðŽQ□Æ,μ,Ä,,¾,¾,¢□B

{button ,AL(`administrator',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

## <sup>∭</sup>Cumulus,ÌŠÇ—∏ Cumulus Server,Éf⊡fOflf",∙,é,É,Í

Cumulus NetworkfT[[fo,ª, ,éŠÂ<<<,Å,ĺCumulus Browser,©,ç[]AŠÇ— []ŽÒ,Æ,µ,ÄfT[][fo,Éf[]fOfCf",µ[]AfJf^f[]fO,ð[]ì[]¬,·,é,±,Æ,ª,Å,<,Ü,·[]B

 [fXf^□[fg]f{f^f",ðfNfŠfbfN,µ,Ä[fvf□fOf‰f€],ðf|fCf"fg,µ□A[Cumulus]□A[Cumulus Browser] ,Ü,½,1[Desktop PLUS],1□‡,É'I'ð,µ,Ä,,¾,³,¢

 $ftf@fCf < f f i f ... [[, ] [fT [[fo, É [] Ú' ± ], ð' I'ð, µ, ĉ^{o}, ³, ¢ ]]B$ 

- fT□[fo,ÌTCP/IPf|□[fg"Ô□†,ð•Ï□X,Ü,½,ĺ"ü−ĺ,·,é□ê□‡,ĺ[flfvfVf‡f"],ðfNfŠfbfN,μ,Ä,,¾,³,¢□B
   [□Ú'±flfvfVf‡f"]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B
- ffftfHf‹fg□ý'è,É,µ,Ä,¨,□ê□‡,Í[OK],ðfNfŠfbfN,µ,Ä,,¾,³,¢□Bf|
   [[fg"Ô□†,ð•ï□X,·,é□ê□‡,Í□A□V,µ,¢"Ô□†,ð"ü—ĺ,µ□A[OK],ðfNfŠfbfN,µ,Ä, ,¾,³,¢□B•ï□XŒã□AffftfHf‹fg,Ì"Ô□†,É-ß,·,É,Í□A[ffftfHf‹fg]□A[OK],Ì□‡,ÉfNfŠfbfN,µ,Ä, ,¾,³,¢□BfLfff"fZf‹,·,é,É,Í□A[fLfff"fZf‹],ðfNfŠfbfN,µ,Ä,,³4,□B

 $fT\square[fo\square[,ð\squareÚ'\pm\%\hat{A}''\,É,\cdot,é\squareê\square‡,Í\squareAf|\square[fgfif"fo\_[,ð-¾<L,\cdot,é•K—v,ª, ,è,Ü,.:DBffftfHf<fg,Å,Í□Af] \\ [[fgfif"fo\_[,Í39287,É,È,Â,Ä,¢,Ü,.:DB'¼,ÌfT□[fo,Æ,Ì,Ô,Â, ©,Á,Ä<'[â,³,ê,½]ê□‡,É,Ì,Ý•Ĩ□X,ð,µ,Ä,-,¾,³,¢]B$ 

- $4. \quad [\Box \acute{U}`\pm fT\Box [fo], \mathring{A}\Box A\Box \acute{U}`\pm \Box æ, \grave{I}fT\Box [fo, \check{\delta}`I`\check{\delta}, \mu, \ddot{A}, , \overset{3}{4}, ^{3}, \ \ \ \Box B$
- 5. [ft□[fU"F□Ø],Å□A["o˜^ft□[fU],ð'l'ð,μ,Ä,,¾,³,¢□B
- [ft□[fU-¼]ftfB□[f<fh,É[CumulusAdmin]□A[fpfXf□□[fh]ftfB□[f<fh,É[Cumulus],Æ"ü—ĺ,µ,Ä,-,¾,³,¢□B
- 7. [OK],ðfNfŠfbfN,μ,Ä,,¾,,3,¢∏B

'[]: ffftfHf<fg,ÌŠÇ—[]ŽÒf†[[fU-¼,ÆfpfXf]][[fh,Ì]Ú]×,Í]A[]wCumulus NetworkŠÇ—[]ŽÒf}fjf... fAf<[]x,ðŽQ[]Æ,µ,Ä,,¾,³,¢]B

 $\begin{array}{l} \underline{[f]f^f[]fO,\ddot{O},\dot{]}fAfNfZfX]f\_fCfAf[]fOf{fbfNfX}, {}^{a}\check{S}J, & (\begin{subarray}{c} AGE \end{subarray}), & (\bedin{subarray}{c} AGE \end{suba$ 

{button ,AL(`administrator',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

## Ü Cumulus,ÌŠÇ—[] fNf‰fCfAf"fg,Ì[Ú'±‰ð]œ

fJf^f⊡fO,Ì⊡í⊡œ□A^3⊡k□A,Ü,½,ÍfŠfXfgfA,È,Ç,Ì,³,Ü,´,Ü,ÈfJf^f⊡fO□C•œ'€□ì,ð⊡s,¤,Æ,«,Í□AfNf ‰fCfAf"fg,ð□Ú'±‰ð□œ,µ,Ü,□BfNf‰fCfAf"fg,ð□Ú'±‰ð□œ,·,é,Æ,«,Í□AfNf ‰fCfAf"fg,ª□í□œ,³,ê,é,Ü,Å,ÌŽžŠÔ,Æ□A□í□œŽž,ÉfNf‰fCfAf"fg,É•\ ަ,³,ê,éf⊡fbfZ□[fW,ðŽw'è,Å,«,Ü,·□B

#### fNf‰fCfAf"fg,ð□Ú'±‰ð□œ,∙,é,É,Í

- [f□fbfZ□[fW]ftfB□[f<fh,Éf□fbfZ□[fW,ð"ü−ĺ,μ,Ü,·□B</li>
- 3. [OK],ðfNfŠfbfN,μ,Ü,·□B

# ©Cumulus,ÌŠÇ—□ fJf^f□fO,Ì□\□¬

ŽŸ,Ì□Ý'è,ð□s,¤,±,Æ,ª,Å,«,Ü,·□B

- f]f^f□fO,̕ۑ¶•û-@
- Cumulusf∏fO,ð—LŒø/-³Œø
- 1,Â,ÌfJf^f□fO,Ì□Å'å<-—ef□fOfGf"fgfŠ□"
- f]f^f□fOŽž,É□ì□¬,·,éfTf€flfCf<,ÌffftfHf<fgfTfCfY</li>
- fJfefSfŠ-¼,Ì□d•¡,Ì<-‰Â
- f†□[fUŒ ,¨,æ,ÑfAfNfZfX

 $fJf^f\Box fO \Box \oldsymbol{\scalar} fJf^f\Box fO \Box \oldsymbol{\scalar} fOf \oldsymbol{\scalar} fJf^f\Box fO \Box \oldsymbol{\scalar} fOf \oldsymbol{\scalar} fOf$ 

- f]f^f□fOf□fjf...□[, ©, ç[f]f^f□fO□Ý'è],ð'l'ð, μ,Ä,,¾,, ¢□B
   [f]f^f□fO□Ý'è]f\_fCfAf□fOf{fbfNfX,É,Í3,Â,Ìf^fu,ªŠÜ,Ü,ê,Ä,¢,Ü,·□B
  - □ <u>^ê"Ê</u>
  - I <u>fJf^f⊡fO</u>
  - □ <u><¤—L∏Ý'è</u>

 $f^{fu}, \delta \Box \emptyset, e' \ddot{O}, |, \acute{e}, \acute{E}, \acute{I} \Box A f^{fu}, if^{fC} fgf <, \delta fNf \check{S} fbfN, \mu, \ddot{U}, \cdot \Box B$ 

 f}fEfX,ðŽg,Á,Ä'l'ð,μ□A["K—p],ðfNfŠfbfN,μ,Ä,,¾,³,4□B,·,×,Ä,Ì'l'ð,ð— Lο,É,μ,½□ó'Ô,Åf\_fCfAf□fOf{fbfNfX,ð•Â,¶,é,É,Í□A[OK],ðfNfŠfbfN,μ,Ä,-,¾,³,4□BfLfff"fZf<,·,é,É,Í[fLfff"fZf<],ðfNfŠfbfN,μ,Ä,,¾,³,4□B</li>

{button ,AL(`administrator',0,`',`')}  $\underline{\check{SO}^{-}A_{\Box} \in -\acute{U}}$ 

# <sup>[]</sup>Cumulus,ÌŠÇ—[] <sup>[]</sup>fJf^f⊡fO,Ì[]\[]¬

# Ĩ[j]jf^f□fO□Ý'è]f\_fCfAf□fOf{fbfNfX,Ì[^ê″Ê]f^fu

[^ê"Ê]f^fu,É,ĺŽŸ,ÌflfvfVf‡f",ª, ,è,Ü,·□B

flfvfVf‡f"	-Ú"I
fJf^f□fO□Fftf@fC f<	Œ»∏Ý,ÌfJf^f□fOftf@fCf‹,Ì∙Û'¶∏ê∏Š,Æftf @fCf‹-¼,ð∙\ަ,μ,Ü,·∏B
ſJf^f⊡fO⊡F-¼'O	fNf‰fCfAf"fg,É'Î,µ,Ä∙\ަ,³,ê,éfJf^f⊡fO– ¼,ð∙\ަ,µ,Ü,·□BŽÀ□Û,Ìftf@fCf<– ¼,Æ^Ù,È,é□ê□‡,ª, ,è,Ü,·□B
ſJſ^ſ⊡ſO□F∙Ï□XŒ <‰Ê	ƒͿƒ^ƒ□ƒO,ɉÁ,¦,½∙Ϊ□X,̕ۑ¶∙û– @,ðŽw'è,µ,Ü,·□B— LŒø,ȃlfvƒVƒŧƒ",É,ĺŽŸ,Ì,à,Ì,ª, ,è,Ü,·□B □
	•Ï□XŒ‹‰Ê,ð,·,®,ɕۑ¶,·,é□BfJf^f□f O,ÉŠÖ,·,é"à— e,Ì•Ï□X,ð'¼,¿,ÉfffBfXfN,É□',«□ž,Ý,Ü,· □B
	•Ï□Xœ<‰Ê,ðœã,ŕۑ¶,·,é□B,± ,ÌflfvfVf‡f",ÍŽÀ□s,ª'¬,¢•ª□A^À'S□«,É œ‡,⁻,Ü,·□BfVfXfef€ ,ª"j'¹,µ,½□ê□‡□AfJf^f□fO,ð□Ä□\'z,·,é •K—v,ª□¶,¶,é,©,à,µ,ê,Ü,¹,ñ□B
fJf^f□f0□F□í□œ, μ,½fŒfR□[fh,ð∙ œŠ^‰Â"É,∙,é	,± ,ê,ðf`fFfbfN,∙,é,Æ[]A[]í[]œ,μ,½fŒfR[[[fh,ĺ •\ ަ,³,ê,Ü,¹,ñ,ª[]AfJJf^f[]fO,©,ç[]í[]œ,³,ê,é,í, ⁻,Å,ĺ, ,è,Ü,¹,ñ[]BfJJf^f[]fOf[]fjJf [[,©,ç[[]í[]œfŒfR[][fh,𕜊^] ,ð'l'ð,∙,é,Æ[]A,∙,×,Ä,Ì[]í[]œ,μ,½fŒfR[][fh, 𕜊^,Å,«,Ü,·]B
f□fO□î•ñ	,±,Ì□€-Ú,ðf`fFfbfN,∵,é,Æ□AfNf ‰fCfAf"fg,ªfJf^f□fO,É'Î,µ,Ä□s,È,Á,½"à —e,ªf□fOftf@fCf<,É <l~^,³,ê,ü,∵□b[on] ,ð'I'ð,µ,½□ê□‡,Í□A[□Å'å<l~^□"]ftfb□[f<fh ,É□ARAMfx□[fX,Ìf□fO,ɕۑ¶,µ□AŠÇ— □ŽÒfEfBf"fhfE,Å•\ ަ,Å,«,é□Å'åfGf"fgfŠ□",ð"ü— Í□A"o~^,µ,Ü,∵□BRAMfx□[fX,Ìf□fO,Í□A[f□f O,ð•Û'¶,∵,é]□i^È ‰°ŽQ□Æ□j,Åf□fOftf@fCf&lt;,ðŽw'è,µ,È,¢ ,©,¬,è□AfJf^f□fO,ð•Â,¶,½Žž"_,ŕۑ¶,³, ê,Ü,¹,ñ□B</l~^□"]ftfb□[f<fh </l~^,³,ê,ü,∵□b[on] 
я <b>лао х</b> . (на 4	$ \begin{array}{l} \square \dot{U} \square \times , \dot{E}, \dot{A}, \dot{e}, \ddot{A}, \dot{I} \square A[\underline{\check{S}} \underline{C} \underline{-} \\ \underline{\square} \check{Z} \grave{O} \underline{f} \underline{E} \underline{f} \underline{B} \underline{f}'' \underline{f} \underline{f} \underline{F}, \underline{\check{Z}} \underline{g} \underline{-} \underline{p} \underline{-} \underline{\otimes}, \dot{E}, \hat{A}, \underline{e}, \underline{\ddot{A}} \end{bmatrix} \\ , \delta \check{Z} \bigcirc \underline{\mathbb{Z}}, \mu, \ddot{A}, , \overset{3}{4}, \overset{3}{4}, \overset{3}{4} \bigcirc \underline{\mathbb{B}} \\ \downarrow \square \square$
J∐JU,0∙U`¶,∙,e	—∟œø,ĖJIJVJVJ∓J¨,Ė,I∠Y,I,a,I,ª, ,ė,U,∙∐B

I f⊡fO,ð•Û'¶,∙,é⊡B,±,Ì⊡€-

 $\begin{array}{l} \dot{U},\delta f \hat{f} F f b f N,\cdot,\acute{e}, \mathcal{A}_{\square} A f \| f \uparrow f \square f O, \eth \bullet \hat{A}, \P, \frac{1}{2} \\ , \mathcal{A}_{:}, \ll, \acute{E} \square A f \square f O f G f "f g f \check{S}, \overset{a}{Z} w' \grave{e}, \mu, \frac{1}{2} f f \square g f G f (f g f \check{S}, \overset{a}{Z} w' \grave{e}, \mu, \frac{1}{2} f f \square g f G f (f g f \check{S}, \overset{a}{Z} w' \grave{e}, \mu, \frac{1}{2} f f \square g f G f (f g f \check{S}, \overset{a}{Z} w' \grave{e}, \mu, \frac{1}{2} f f \square g f G f (f g f \check{S}, \overset{a}{=} Z w' \grave{e}, \mu, \frac{1}{2} f \square g f \square f \cap f \square f \square f O f f (f g f \check{S}, \overset{a}{=} Z w' \grave{e}, \mu, \frac{1}{2} h f \square f \cap f \square f \cap f \square f O, \delta \check{S}], - \\ , \dot{h}, \acute{E} \check{Z} \check{S} \hat{O}, \overset{a}{=}, \textcircled{O}, \overset{a}{=}, \overset{a$ 

I ftf@fCf<,ð□í,É□Å□V,É,·,é□B,±,Ì□€-Ú,ðf`fFfbfN,·,é,Æ□AfJf^f□fO,É•ï□X,ª ‰Á,¦,ç,ê,é,Æ"<sup>-</sup>Žž,É□AfGf"fgfŠ,ðf□fO ftf@fCf<,ɕۑ¶,µ,Ü,·□B</pre>

{button ,AL(`administrator',0,`',`')} <u>ŠÖ~A□€-Ú</u>

#### ©Cumulus,ÌŠÇ—□ □fJf^f□fO,Ì□\□¬ [fJf^f□fO□Ý'è]f\_fCfAf□fOf{fbfNfX,Ì[fJf^f□fO]f^fu

[flf^f□f0]f^fu,É,ĺŽŸ,ÌflfvfVf‡f",ª, ,è,Ü,·□B [[]'΃ftfHf<f\_[Ý'è] ŠC— []ŽÒ,Í[]Af]f^f[]fO,µ,½ftf@fCf<, $^{a}$ ]ACumulus,ÅŽw'è,µ,½ <u>□'ŒÉftfHf́<f</u>,ÉfRfs□[,³,ê,é,æ,¤,ÉCumulus ,ð<u>□</u>Ý'è,Å,«,Ü,·□B□'ŒÉftfHf‹f\_,Ì— Lο,ÈflfvfVf‡f",É,ĺŽŸ,Ì,à,Ì,ª, ,è,Ü,·∏B [□s,í,È,¢],ðf`fFfbfN,,,é,Æ□A□'ŒÉftfHf<f,Ì<@"\,ª-³Œø,É,È,è,Ü,∙∏B [fJf^f□fOfIfvfVf‡f",É□],¤] ,ðf f ff bf N, , ,é, Æ□AfJf f ⊡f Oftf@fCf <,ð□'ŒÉftfHf <f\_, ÉfRf s□[, ·,é,©□AŒ³, Ì□ê□Š, ÉŽc,µ,Ä,¨,,©,ðŠefNf ‰fCfAf"fg'¤,Å'l'ð,Å,«,Ü,·□B,± ,ÌflfvfVf≠f",ð'l'ð,μ,½□ê□‡□A□'ŒÉftfHf‹f\_,ðŽw'è,∙,é,æ, ¤f□fbfZ□[fW,ª•\ަ,³,ê,Ü,·□B [∏s,¤] ,ðf`fFfbfN,∙,é,Æ∏AfJf^f∏fO,μ,½ftf@fCf<,ĺ,©,È,ç,,□'ŒÉ ftfHf<f\_,ÉfRfs[[,³,ê,Ü,·[]B,± ,ÌflfvfVf‡f",ð'l'ð,μ,½□ê□‡□A□'ŒÉftfHf‹f\_,ðŽw'è,∙,é,æ, ¤f□fbfZ□[fW,ª•\ަ,³,ê,Ü,·□B flfCfefBfufTfCfY ,±,أ∏€-Ú,ðf`fFfbfN,∙,é,Æ□AfJf^f□fOŽž,É□ì□¬,∙,éfTf€flfCf<,Ìffftf Hf<fqfTfCfY,ð∏Ý'è,Å,«,Ü,·∏B— Lο,ÈflfvfVf‡f",ÌfsfNfZf<'Ī,Í[A96[]~96[]A128[]~128[]A 192□~192,Ì3Ží—Þ,Å,·□BfTfCfY,ª'å,«,¢,ÆfTf€flfCf<,Ì•\ ަfTfCfY,ð•Ï⊓X,µ,Ä,à'N-<sup>3</sup>⁄<sub>4</sub>,ÉŒ©,¦,Ü,·,ª∏A"½'Î,É∏Af]f^f∏fO,Ì—e—Ê,ª'∏,¦,é,± ,Æ,É,È,è,Ü,∙⊓B 'l'ð,μ,½fTf€flfCf<fTfCfY,ª□AfJf^f□fOŽž,ÌffftfHf<fgfTfCfY ,É,È,è,Ü,∙⊓BfNf ‰fCfAf"fg,Í•ÊfŒfR□[fhfEfBf"fhfE,ÌfTf€flfCf<,Ì•\ ަfTfCfY,ð•Ï[[X,Å,«,Ü,·,ª[]AŽÅ[]Û,Í[]A[]Ì[]¬Žž,ÌfTfCfY,©, çfXfP□[f<,³,ê,Ü,·□B ПÈ— <sup>\_</sup><sup>¯</sup>Žž⊓Ý'è,ð∙Ï⊓X,μ,Ä,à⊓Aflf^f⊓fO"à,ÌŠù'¶,ÌfŒfR⊓[fh,Í•Ϊ ‰»,μ,Ü,¹,ñ⊓BΠV<KfŒfRΠ[fh,ÌfTf€flfCf<,ÍΠA•ÏΠXŒã,ÌΠÝ <u>'è</u>,É,μ,½,ª,¢∏ì∏¬,³,ê,Ü,·∏B fJfefSfŠ-¼ fJfefSfŠ-¼,ÌfIfvfVf‡f",Í[]AfJfefSfŠ-¼,Ì□d•;,ð"F,ß,é,©"F,ß,È,¢,©,ÌŽw'è,ð,µ,Ü,·□B— Lο,ÈflfvfVf‡f",É,ĺŽŸ,Ì,à,Ì,ª, ,è,Ü,·□B □ []d•;,ð"F,ß,é  $[\Box d \bullet_i, \delta^{"}F, \beta, e], \delta f f F f b f N, \cdot, e, E \Box A \bullet_i \Box^{"}, f f e f S f S, E^{+-}, \P -$ <sup>1</sup>⁄<sub>4</sub>'O,ðŽg—p,Å,«,Ü,·[]B,½,¾,μ[]A[]d•¡,μ,½fJfefSfŠ-¼,ð"ü—ĺ,∙,é∏ê∏‡,ĺ∏A,∙,×,Ä,ÌfpfX,ðfRf∏f",Å<æ∏Ø,Á,Ä,- $,^{3}_{4},^{3},$ ¢ $\Pi$ B, $\pm$ ,×, $\mu$ ,È,¢,Æ $\Pi$ A $\Pi$ Å $\Pi$ ‰ ,ÉŒŸ<u>□</u>õ,μ,½fJfefSfŠ,ªŽg—p,³,ê,Ä,μ,Ü,¢,Ü,·□Bfhf

‰fbfO&fhf□fbfv,Å'€□ì,·,é□ê□‡,Í□AfpfX,Í•s—v,Å,·□B

 $\Box \Box d \bullet_i, \delta^{"}F, \beta, \dot{E}, \dot{c}(f+f) \Box [fN)$ 

$$\label{eq:constraints} \begin{split} & [\Box d \bullet_i, \delta''F, B, E, c(ftj] [fN)], \deltaf`fFfbfN, \cdot, \acute{e}, \& [Af]fefSfŠ- \end{tabular}^{1/4}, \dot{I} ] d \bullet_i, \delta < \ddot{O} Z \sim, \mu, \ddot{U}, \cdot \Box B \check{S} \dot{U}, \acute{E} Z g - p, \mu, \ddot{A}, c, \acute{e} - \end{tabular}^{1/4} & (O, \delta \check{S}_{,,,} \acute{e}^{-}, \ddot{A}, æ, ¤, \mathcal{E}, \cdot, \acute{e}, \& [A G E x \Box \Box f \Box f b f Z \Box [fW, ^a \bullet \end{tabular} \\ & \check{Z}_{l}, ^{3}, \acute{e}, \ddot{U}, \cdot \Box B, \pm, \dot{l} f l f v f V f \ddagger f'', \delta - \end{tabular} \\ & L \mathfrak{C} ø, \acute{E}, \mu, \ddot{A}, \grave{a} \Box A \check{S} \dot{u}' \P, \dot{l} f J f efSf \check{S}, \acute{E} & e < ¿, ĺ, , \grave{e}, \ddot{U}, ^1, \widetilde{n} \Box B \end{split}$$

{button ,AL(`administrator',0,`',`')} <u>ŠÖ~A□€–Ú</u>

# **[f]f^f□f0]f^fu** Šù'¶,ÌfŒfR□[fh,ÌfTf€flfCf<fTfCfY,ð□X□V,•,é 1. □X□V,•,éfŒfR□[fh,ð'l'ð,µ,Ä,,¾,³,¢□B

- 2.  $f \oplus f \mathbb{R}[[fhf]_{fjf}...][, @, c[[X]V]] A[\langle ] \otimes [X]V], \dot{h} = \dot{E}' I' \delta, \mu, \ddot{A}, \beta'_{4}, \beta'_{4}, \phi'_{4} B$ ʻl'ð,μ,½fŒfR□[fh,Ì□V<KfTf€flfCf<,ª□ì□¬,³,ê,Ü,·□B

## © Cumulus,ÌŠÇ—[] ∭fJf^f[]fO,Ì[]\[]¬ [fJf^f[]fO['Ý'è]f\_fCfAf[]fOf{fbfNfX,Ì[<¤—L['Ý'è]f^fu

[‹¤—L□Ý'è]f^fu,Å,Í□AfJf^f□fO,Ö,ÌfAfNfZfX,ÉŠÖ,·,é,³,Ü,´,Ü,È□Ý'è,ª,Å,«,Ü,·□BŠefIfvfVf‡f",Í□A,²Žg —p,ÌCumulus,É,æ,Á,Ä^Ù,È,è,Ü,·□B,²—~—p,Å,«,éfIfvfVf‡f",Í^ȉº,Ì'Ê,è,Å,·□B

fAfNfZfX□iDesktop/Desktop Plus,¨,æ,ÑNetworkfT□[foŠÇ —□ŽÒ□j	[_',«_]ž,Ý— pfpfXf]_[[fh]ftfB][f‹fh"à,É"C^Ó,ÌfpfXf]][[fh,ð]Ý'è,·,é,Æ]Af Jf^f]fO,ðŠJ,[]Û,É[]AfpfXf]][[fh,ð•·,¢ ,Ä,«,Ü,·]BfpfXf]][[fh,ð"ü,ê,È,¢ ,Æ]]AfJf^f]fO,ªf][fbfN,³,ê,½]oʻÔ,ÅŠJ,«,Ü,·]]B
<¤—L	□E[fJf^f□fO,ð<¤—L,∙,é]□iNetworkfT□[foŠÇ—□ŽÒ,Ì,Ý□j fJf^f□fO,ðfNf‰fCfAf"fg,ªfAfNfZfX,Å,«,é,æ,¤,É,È,è,Ü,·□B
	<pre>[E[f]f^f[fO,ðWeb&lt;¤—L,·,é][iDesktop Plus, ",æ,ÑNetworkfT[[foŠÇ—[]ŽÒ[]j f]f^f[fO,ð]ACumulus Internet Media Server[i'Ê[]i:CIMS[]jfVfXfef€,Å[AWebfuf ‰fEfU,©,çfAfNfZfX,Å,«,é,æ,¤,É,µ,Ü,·[]BDesktop PLUSft[[fU,ª,±,ÌflfvfVf‡f",ðŽg—p,·,é,½,ß,É,Í[]A[CIMS.exe] ,ð<n" ,è,ü,·[]b<="" pre="" ®,µ,ä,",•k—v,ª,=""></n"></pre>
fAfNfZfXŒ ,Ì∏Ý'è∏iNetworkf T∏[foŠÇ—∏ŽÒ,Ì,Ý∏j	fJf^f□fO,ÉfAfNfZfX,Å,«,éfNf ‰fCfAf"fg,Ì"Á'è,Æ□A,»,ÌfAfNfZfXŒ ,ð□Ý'è,Å,«,Ü,·□B

# ÜCumulus,ÌŠÇ—∏

## □',«□ž,Ý—pfpfXf□□[fh(ŠÇ—□ŽÒ,Ì,Ý)

$$\label{eq:starset} \begin{split} & []`, & []\check{z}, \acute{Y} - pfpfXf] [] [fh, \acute{I}]A[f]f^{f}]fO[\acute{Y}`e]f_fCfAf] fOf \{fbfNfX, \grave{I}[ < \texttt{x} - L[]\acute{Y}`e]f^{f}u, \& ]\acute{Y}`e, \mu, \ddot{U}, \cdot ]B \\ & []`, & []\check{z}, \acute{Y} - pfpfXf] [] [fh], \acute{E}[]A[]`, & []\check{z}, \acute{Y} - h\check{Z} - f]f^{f}] fO, & []`[]^{\neg}, \cdot, \acute{e}, \frac{1}{2}, \&, \grave{I}fpfXf] [] [fh, \& ]\acute{Y}`e, \mu, \ddot{U}, \cdot ]B \\ \end{split}$$

## ŪCumulus,ÌŠÇ—[] ƒJƒ^ƒ[]fO,Ì"®[]ì[ó<μ,ÌŠÄŽ<

fJf^f□fO,ÌfAfNfefBfrfefB,ĺŠÇ—□ŽÒfEfBf"fhfE,©,çf,ƒjf^□[,Å,«,Ü,·□B^ê"Ê,ÉŠÇ— □ŽÒfEfBf"fhfE,Å,ĺ^ȉ⁰,Ì,±,Æ,ðf,ƒjf^□[,μ,Ü,·□B

- $\label{eq:constraint} \label{eq:constraint} \label{constraint} \label{eq:constraint} \$
- I ftf@fCf<, $a^{a}$ "]'—, $^{3}$ , $\hat{e}$ , $\frac{1}{2}$ []ó< $\mu$
- □ fXfe□[f^fXfŠfXfg,ª□C□³,³,ê,Ä,¢,é,©,Ç,¤,©

ŽŸ,Ì'€∐ì,ª,Å,«,Ü,·∐B

<u>ŠÇ—□□î•ñ,Ì•\Ž</u>¦

<u>f□fOftf@fCf‹,̕ۑ¶</u>

<u>f□f0ftf@fCf<,ÌfNfŠfA</u>

{button ,AL(`administrator',0,`',`')} <u> $\dot{SO}^{A} \subseteq -\dot{U}$ </u>
### ÜCumulus,ÌŠÇ—[] Ū fJf^f[f0,Ì"®[]ì[ó<μ,ÌŠÄŽ< ŠÇ—[ŽÒ[ĵ∙ñ,Ì•\ަ

ŠÇ—□□î•ñ,Í□AŠÇ—□ŽÒf,□[fh,Å•\ަ,³,ê,Ü,·□B

### ŠÇ—[]ŽÒfEfBf"fhfE,ðŽg—p,·,é

SÇ—□ŽÒfEfBf"fhfE,ÉfAfNfZfX, , , é, É, Í□AfJf^f□fO,ðŠJ, «□A•\ަf□fjf…□[, ©, ç[ŠÇ—□ŽÒf,□[fh], ð'l'ð, μ, Ü, ·□B

ŠÇ—□ŽÒfEfBf"fhfE,ª•\ަ,³,ê,Ü,·□B

$$\begin{split} & \mathbb{E}^{f_{1}}(f) = \mathbb{E}^{1} \\ & \mathbb{E}^{$$

 $fEfBf"fhfE, \dot{l}\_\ddot{a}'[, \acute{E}, \acute{I}\_A \check{Z} \ddot{Y}, \dot{l}, æ, ¤, \grave{E}\_d - v, \grave{E}\_\hat{i} \bullet \ddot{n}, \overset{a}{\bullet} \setminus \check{Z} \\ , \overset{3}{,} \grave{e}, \ddot{U}, \cdot \_B$ 

- [] []@f@f@fR[[fh[]"
- □ fJf^f□fO,Ìf□f,fŠ,Ì<ó,«—e—Ê

### fJf^f[]fO,ðŠJ,[]Û,ÉŠÇ—[]ŽÒf,[][fh,ð•\ަ,³,¹,é,É,ĺ^ȉº,ÌŽè[]‡,É[]],¢,Ü,·

- •\ަf□fjf...□[,©,ç[fAfvfŠfP□[fVf‡f"□Ý'è],ð'l'ð,·,é□B
  [fAfvfŠfP□[fVf‡f"□Ý'è]f fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,é□B
- [^ê"Ê]f^fu,ð'l'ð,∙,é□B
- [f]f^f□fO,ðŠJ,],©,ç[ŠÇ—□ŽÒf,□[fh],ð'l'ð,,é□B

{button ,AL(`administrator',0,`',`')}  $\underline{\check{SO}^{-}A_{\Box} \in -\acute{U}}$ 

### ©Cumulus,ÌŠÇ—[] ∫∫f^f[f0,Ì"®[]ì[ó<μ,ÌŠÄŽ< f[f0ftf@fCf<,̕ۑ¶

 $f [] f O [] \hat{\bullet} \tilde{n}, \hat{I} ] A fefL f X fgft f @ f C f < , & , \mu, \ddot{A} \hat{\bullet} \hat{U} ^{n}, & , \ddot{U}, \cdot ] B f [] f O f t f @ f C f < , \hat{I} [ <u>f f f O [] \dot{Y} \dot{e} ] f f C f A f [] f O [] \dot{Y} \dot{e} ] f \\ X, & A f Z f b f g f A f b f v, \mu, \ddot{U}, \cdot ] B [f] f ^ f [] f O [] \dot{Y} \dot{e} ] \\ , & A f [] f O f t f @ f C f < , \dot{\sigma} ' I \dot{\sigma}, \cdot, \acute{e}, & A c u mulus \ddot{Z} \dot{A} ] s' +, & \acute{E} \breve{Z} @ " @ "I, & \acute{e}, & , \\ \dot{A} f [] f O f t f @ f C f < , \dot{\sigma} ' I \dot{\sigma}, \cdot, & \acute{e}, & A c u mulus \ddot{Z} \dot{A} ] s' +, & \acute{E} \breve{Z} @ " @ "I, & \acute{e}, & , \\ \dot{Z} |_{,^{3}}, & \hat{e}, & \ddot{U}, \cdot, ^{a} ] A [f ] f O, & \dot{\sigma} \cdot \hat{U} ' \P ] f R f \} f " f h, & \check{Z} g, & \acute{A}, & \check{A} f e f L f X f g f t f @ f C f < , & \acute{E} \cdot \hat{U} ' \P, \mu, & \dot{e}, & \dot{e} ] A \hat{\bullet} \setminus \\ \dot{Z} |_{,^{3}}, & \dot{e}, & \ddot{U}, \cdot, ^{a} ] A [ f ] f O, & \dot{\sigma} \cdot \hat{U} ' \P ] f R f \} f " f h, & \check{\delta} \check{Z} g, & \acute{A}, & \check{A} f e f L f X f g f t f @ f C f < , & \acute{E} \cdot \hat{U} ' \P, \mu, & \dot{e}, & \dot{e} ] A \hat{\bullet} \setminus \\ \dot{Z} |_{,^{3}}, & \dot{e}, & \ddot{U}, \cdot, ^{a} ] B \end{cases}$ </u>

### f□fOftf@fCf<,ð•Û'¶,∙,é,É,Í

### ÜCumulus,ÌŠÇ—[] ÜfJf^f[fO,Ì"®[]ì[ó<μ,ÌŠÄŽ< f[fOftf@fCf<,ÌfNfŠfA

$$\begin{split} & (E*) [Y, \hat{I}] [fOftf@fCf <, \delta fNf ŠfA, \mu, \ddot{A} []A, *, \pm, @, \varsigma, \cdot, \times, \ddot{A}, \hat{I} [] \hat{\bullet} \tilde{n}, \delta [] \dot{A} < \check{Z}, \mu []A [] \dot{A} [] & (*, e^{-1/4}, \cdot, \pm, \mathcal{F}, a^{-1/4}, a^{-1/4}, \cdot, \pm, \mathcal{F}, a^{-1/4}, a^{-1/4}$$

### f□fOftf@fCf<,ðfNfŠfA,•,é,É,Í

 $I f]f^f[f0f]fjf...[[, ©, c[f]f0, \delta fNfŠfA], \delta'l'\delta, \mu, Ü, UB]$ 

{button ,AL(`administrator',0,`',`')} <u>ŠÖ~A□€-Ú</u>

#### <sup>[[]</sup> <sup>[[]</sup>Gumulus,ÌŠÇ—[] <sup>[[]</sup>G,Ì"®[]ì[]ó<μ,ÌŠÄŽ< fŒfR[[fhfTfCfY,ÌŒ^'è—v'f

 $\begin{array}{l} CumulusfJf^f[]fO, I(\circ \acute{o}, I)[O(\circ \acute{o}, A1, 024KB, A, \cdot []B < \acute{o}, IJJf^f[]fO, I, ``, æ, »160KB, IRAM, ð • K — v, Æ, \mu, Ü, · []Bff[][f^, ð, ·, I, â, ŒŸ[]õ, ·, é, ½, ß[]ACumulus, I, ·, ×, Ä, IfŒfR[][fhff][f^, ÉfCf"fffNfX, ð • t, <sup>-</sup>, Ä, ¢, 'Ü, · []B, ±, I, ½, ß[Cf"fffbfNfX, IJJf^f][fO"à, IfŒfR[][fh[]", É"ä—á, \mu, Ä'[]'å, \mu]AfefLfXfg, a'å — Ê, É, È, é, Æ[]A"ñ[](, I'å, «, È, à, I, É, È, Ü, · []B \\ \end{array}$ 

fŒfR[][fh,ÌfTfCfY,ðŒ^'è,੶,éŽå,È—v'f,ĺŽŸ,Ì,à,Ì,Å,•

### • ftf@fCf‹,ÌŠî-{∏î•ñ

Cumulus,Í[]AfJf^f[]fO[]\‹Æ'†,É"Á'è,Ì[]î•ñ,ðŽ©"®"I,ÉŽæ,è[]ž,Ý,Ü,·[]BŠî– {ftf@fCf‹[]î•ñ,Í[]AfŒfR[][fh,Ì'†,Å[]Å,à—e—Ê,Ì[],È,¢[]î•ñ,Ì,Ð,Æ,Â,Å, ,è[]AfŒfR[][fh'S'Ì,ÌfTfCfY,ð' å•[],ɕω»,³,¹,é,à,Ì,Å,Í, ,è,Ü,¹,ñ[]B

### ftf@fCf‹Œ`Ž®"Á—L,Ì□î•ñ

 $\label{eq:approx_appr$ 

### • fm□[fg—",ÌfefLfXfg,Ì•ª—Ê

,±,Ì—",É"ü—Í,·,é[□Û,Í[□Afm[[fg,Ì•ª—Ê,ª'½‰ß,¬,é,ÆfJf^f[]f0[]ì<Æ,ÉŽžŠÔ,ª,©,©,é,± ,Æ,ðŠo,¦,Ä,¨,¢,Ä,,¾,³,¢[]B'·,¢Œ¾,¢‰ñ,µ,Í"ð,¯[]A,Å,«,é,©,¬,è•¶□ĺ,ð'Z,,µ[]A•s v,È'PŒê,ð[]È,,æ,¤,É,µ,ĉº,³,¢[]Bfm[[fg—",É,Í[]Å'å32 KB,Ì[]î•ñ[]i"ú-{Œê16,000Œê[]j,ð"ü ĺ,Å,«,Ü,·,ª[]A,±,ê^ȉº,Å,à[]AfefLfXfg,Ì•ª—Ê,ª'½,¢,ÆfVfXfef€,Ì"®[]ì'¬"x,Í'x,,È,è,Ü,·[]B

### • fTf€flfCf<,Ì•iŽ¿/fTfCfY

fJf^f⊡fO,Ì□Ý'莞,É'I'ð,µ,½fTf€fIfCf‹fTfCfY,Í□AfŒfR□[fh,ÌfTfCfY,âCumulus,Ì"®□ì'¬"x,É ‰e‹¿,µ,Ü,·□BCumulus,ÍfOfŒ□[fXfP□[f‹,âftf‹fJf‰□[,ÌfTf€fIfCf‹,ÉJPEG^³□k,ðŽg p,·,é,½,ß□AfŒfR□[fh,ÌfTfCfY,Í,»,ê,¼,ê,Ì"à—e,É,æ,è•ï ‰»,µ,Ü,·□B^ê"Ê,É□AfTf€fIfCf‹,Ì•iŽ¿,ª□,,¢,Ù,Ç□A□ì□¬,·,éfŒfR□[fh,ÌfTfCfY,Í'å,«,,È,è,Ü,·□B

,½,Æ,¦,Î□A4000Œ□,ÌfŒfR□[fh,ð•ÛŠÇ,µ,Ä,¢,éfJf^f□fO,Ì□ê□‡□AfTf€flfCf‹•iŽ¿,ð•W□€□i á□F128□~128fsfNfZf‹□j,É□Ý'è,·,é,ÆfJf^f[fO,ÌfTfCfY,Í-ñ50 MB,Å,·,ª□AfTf€flfCf‹,Ì•iŽ¿,ð□ã,°,é,Æ□i—á□F192□~192fsfNfZf‹□j□AfTfCfY,Í70 MB,Æ'å,«,•Ï ‰»,µ,Ü,·□B

### 96□~96fsfNfZf<,Å□ì□¬,μ,½fTf€flfCf<,É•K—v,ÈfffBfXfN<ó,«—e—Ê□i′P^Ê□FfofCfg□j

‰æ 'œf, □[fh	∙W⊡€	∏,∙i^Ê
f ‰fC f"fA∏ [fg	428	1247
f0f Œ[[[f XfP[] [f<	1392	2998
fJf	1455	3612

‰∏[ 128□~128fsfNfZf<,Å□ì□¬,µ,½fTf€flfCf<,É•K—v,ÈfffBfXfN<ó,«—e— Ê\_i'P^Ê\_FfofCfg\_j ‰æ ∙W⊡€ **∏,∙i^Ê** 'œf, □[fh 962 1955 f ۔ ‰fC f"fĂ□ [fg fOf 1795 4374 Œ[[f XfP[] [f< fJf 1909 5250 ‰∏[ 192□~192fsfNfZf<,Å□ì□¬,µ,½fTf€flfCf<,É•K—v,ÈfffBfXfN<ó,«—e— Ê\_i'P^Ê\_FfofCfg\_j **∏,•i^Ê** ‰æ •W□€ 'œf, [**[fh** f ‰fC 1910 3366 f"fA□ [fg fOf 2700 7660 Œ[[f XfP□ [f<

{button ,AL(`administrator',0,`',`')} <u>ŠÖ~A□€-Ú</u>

fJf

‰⊓[

2849

9316

# <sup>[]</sup>Cumulus,ÌŠÇ—[] fJf^f⊡fO,Ì^³⊡k

fŒfR□[fh,ð□í□œ,µ,½,è•ï□X,·,é,Æ□AfJf^f□fO,É-¢Žg—p,Ì—e— Ê,ª,Å,«,Ü,·□B,»,Ì,½,ß,ÉfJf^f□fO,Ì□«"\,ª'ቺ,·,é,±,Æ,Í, ,è,Ü,¹,ñ,ª□AfJf^f□fO,ª•s v,É'□'å,µ,Ä,µ,Ü,¢,Ü,·□BfJf^f□fO,ð^³□k,·,é,Æ□A,±,¤,µ,½-¢Žg—p,Ì—e—Ê,ðŽæ,è-ß,·,± ,Æ,ª,Å,«,Ü,·□B

^3\_k'+,ĺfJf^f\_f0,ð'¼,Ìf+ [[fU,É<¤—L,³,¹,é,±,Æ,ĺ,Å,«,Ü,¹,ñ ]B,±,Ì,½,ß ]A'N,àŽg—p,µ,Ä,¢,È,¢,ĴJf^f ]f0,ð^3 ]k,·,é,Ì,ª-³"ï,Å,· ]B

^³□k,É,æ,è□A□í□œ,μ,½fŒfR□[fh,ĺ ‰i‹v,ÉfJf^f□fO,©,ç□í□œ,³,ê,Ü,·□BfJf^f□fO^³□kŒã,Í□A<u>□í□œfŒfR□[fh,𕜊^,³,¹,é</u>,±,Æ,ĺ,Å,«,È,-,È,è,Ü,·□B

### fJf^f□fO,ð^³□k,∙,é,É,Í

- $1. \quad \text{``}\check{Z}_{f}_{jf}..._{[, \column{$\mathbb{C}$}, c[\check{S}_{c}_{d}]_{d}, c]} \\ \hat{Z}_{f}_{d}, \hat{Z}_{d}, \hat{Z}_$
- 2. fJf^ff(f)ff(f)f)f),...[[,@,ç[^3]k],ð'l'ð,µ,Ä,, $\frac{3}{4}$ ,<sup>3</sup>,¢

$$\begin{split} \check{Z}\hat{A}]s, &\check{\delta}\check{S}m''F, \cdot, \acute{e}f_fCfAf[]fO, \overset{a}{=} \\ \check{Z}_{,,3}^{,,6}, &\check{U}, \cdot]B^{\bullet}\varpi\check{S}^{,} \\ &\check{A}, \ll, \acute{e}[i]\infty, \mu, \frac{1}{2}f@fR[][fh, \overset{a}{=} ^{3}]k[]i < \mathcal{E}, \acute{E}, \infty, \grave{e}\check{Z}_{,,i}^{,,6}, \acute{e}[]\hat{e}[] \\ & \downarrow, i[]A, \gg, \hat{e}, \check{\delta}'m, \varsigma, \overset{1}{,}\acute{e}f_{,f}^{,}f \\ & CfAf[]fO, \overset{a}{=} \\ & \check{Z}_{,,3}^{,,a}, \acute{e}, \ddot{U}, \cdot]B \end{split}$$

OK,ðfNfŠfbfN,µ,ÄŽŸ,É□i,Ý,Ü,·□B

,±,ÌŽž"\_,ÅfJf^f□fO,ðŽg—p,µ,Ä,¢,éfNf‰fCfAf"fg,ª1□l,Å,à,¢,é□ê□‡,Í□A□Ú'±,ð ‰ð□œ,·,é,æ,¤f□fbfZ□[fW,ª•\ަ,³,ê,Ü,·□B

fJf^f□fO,Ì^³□k,ªŠJŽn,³,ê,Ü,·□B□Š—vŽžŠÔ,Í□AfJf^f□fO,ÌfTfCfY,â‰ð∙ú,·,é—e— Ê,É,æ,è^Ù,È,è,Ü,·□B

{button ,AL(`administrator',0,`',`')}  $\underline{\check{SO}^{\sim}A\square \in -\acute{U}}$ 

#### <sup></sup> Gumulus,ÌŠÇ—□ fJf^f□fO,ðfofbfNfAfbfvfRfs□[,©,畜Š^,³,¹,é,É,Í

fJf^f\_lfO,ð'¼,Ì[]ê[]Š,ÉfRfs[][,µ,Ä,¨,,±,Æ,ÅfofbfNfAfbfv,ð,·,é,± ,Æ,ª,Å,«,Ü,·[]BCumulus,ÌfofbfNfAfbfvftf@fCf‹,Í[]A[]u.bak[]v,Æ,¢ ,¤Šg'£Žq,ª,Â,«,Ü,·[]BfofbfNfAfbfvfRfs[][,ÅfJf^f]fO,ð[]C•œ,·,é,Æ[]AŽ©•ª,ÅfRfs[][,µ,½fofbfNfAfbf vftf@fCf‹,Åftf@fCf‹,Å,·,é,æ,è,àŽžŠÔ,ª,©,©,è,Ü,·[]B

# fJf^f□fO,ð•Ê,̕ۑ¶□æ,ÉfofbfNfAfbfv,∙,é,É,Í^ȉº,ÌŽè□‡,É□],Á,ĉº,³,¢□B

- fofbfNfAfbfv, , , éfJf^f□fO, ªŠJ, ¢, Ä, ¢, é□ê□‡, Í•Â, ¶, Ä, , ¾, ³, ¢□B
  Cumulusf□f, fŠ, É'¶□Ý, , , é•ï□X, ª, , , ×, ÄfJf^f□fOftf@fCf<, ɕۑ¶, ³, ê, Ü, ·□B</li>
- 2. WindowsfGfNfXfvf[][[f‰, @, cfJf^f[fOftf@fCf<,ð'l'ð,µ,Ä,,¾,3,¢]B
- $3. \quad \bullet \hat{E}, if \{f \check{S} f \dots [f \notin, \ddot{U}, \frac{1}{2}, if hf \% f Cfu, i \bullet \hat{U}` \P [a, \dot{E} Af ]f \land f [f O, i f of bf Nf Af bf v, \delta f Rf s [[, \mu, \ddot{A}, , \frac{3}{4}, ^3, \varphi ] B$

# fofbfNfAfbfvfRf}f"fh,ðŽg—p,·,é,É,ĺ^ȉº,ÌŽè□‡,É□],Á,ĉº,³,¢□B

- 1. fofbfNfAfbfv, $, , \acute{efJf} f \Box fO, \delta \check{S}J, c, \ddot{A}, , \overset{3}{,}_{4}, ^{3}, c \Box B$
- 2. f]f^f[]fOf[]fjf...[[, @, c[fofbfNfAfbfv,ð[]]]¬],ð'l'ð,  $\mu$ ,  $\ddot{A}$ ,  $\ddot{4}$ ,  $\ddot{4$

# fofbfNfAfbfvfRfs[[,𕜊^,³,¹,é[]ifŠfXfgfA,·,é[]j

- $1. \ fpftfH\_[f]f"fX, \\ \delta\_Å`a, \\ \acute{e}, \\ \acute{e}$
- fofbfNfAfbfvfRfs□[,ðf\_fuf<fNfŠfbfN,μ,Ä,,¾,³,¢□B</li>
  ,±,ê,ªfofbfNfAfbfvfRfs□[,Å, ,é,±,Æ,ðަ,·f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B
- fofbfNfAfbfvfRfs□[, ©, ç□V KfJf^f□fO,ð□ì□¬, ·, é□ê□‡, ĺ[, ĺ, ¢], ðfNfŠfbfN, µ, Ä,, ¾, ³, ¢□B
  □V KfJf^f□fO,ð Û '¶, ·, é, æ, ¤f□fbfZ□[fW, ª \ަ, ³, ê, Ü, ·□B
- □V<KfJf^f□fO,Ì-¼□Ì,Æ•Û'¶□æ,ð"ü—ĺ,μ□AOK,ðfNfŠfbfN,μ,Ü,·□B</li>
  Cumulus,<sup>a</sup>fJf^f□fO,ÆfCf"fffbfNfX□î•ñ,Ì□Ä□\□¬,ðŠJŽn,μ,Ü,·□B□Š vŽžŠÔ,ĺŽå,É□AfJf^f□fO,ɕۊÇ,³,ê,Ä,¢,éfŒfR□[fh,ì□"—Ê,ÆŽg—p,µ,Ä,¢,éfVfXfef€ ,Ì"®□ì'¬"x,ÉŠÖŒW,µ,Ü,·□B

{button ,AL(`administrator',0,`',`')} <u>ŠÖ~A□€-Ú</u>

# <sup>[</sup>[ΩCumulus,ÌŠÇ—[] []í[]œ,μ,½ftf@fCf‹,ð∙œŠ^,³,¹,é,É,Í

 $\hat{E}^{0,1} \\ \hat{E}^{0,1} \\ \hat{E$ 

- $I f f f f (h, \hat{k}, \hat$
- $\begin{array}{l} ftf@fCf<, \delta f \ensuremath{\mathbb{C}} fh, \ensuremath{\mathcal{E}} < \ensuremath{\mathbb{R}}, \ensuremath{\mathbb{C}}, \ensur$

### [í]œ,μ,½fŒfR[[fh,ð∙œŠ^,³,¹,é,É,Í

- 1. fJf^f□fO,ðŠJ,¢,Ä,,¾,,,¢□B
- ŠÇ—□ŽÒf□fjf...□[,©,ç[□í□œfŒfR□[fh,Ì•œŠ^],ð'l'ð,µ,Ä,,¾,³,¢□B
  ,±,ÌŽž"\_,ÅfJf^f□fO,ðŽg—p,µ,Ä,¢,éfNf‰fCfAf"fg,ª1□l,Å,à,¢,é□ê□‡,Í□A□Ú'±,ð
  ‰ð□œ, ,é,æ,¤f□fbfZ□[fW,ª•\ަ,³,ê,Ü,⊡B

{button ,AL(`administrator',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

# <sup>[]</sup>[]Cumulus,ÌŠÇ—[] []f^f⊡fO,ÌfRfs[[

^ê"Ê,Ìftf@fCf<,Æ"<sup>-</sup>,¶,æ,¤,É[ACumulus,ÌfJf^f[]fO,ðfRfs[][,μ,½,è^Ú"®,³,¹,é,±,Æ,ª,Å,«,Ü,·[]B fJJf^f[]fO,ðfRfs[][,·,é[]Û,ĺŽŸ,Ì"\_,É—<sup>-</sup>^Ó,μ,Ä,,¾,³,¢[]B

I fJf^fDfO,ðŽg—p,μ,Ä,¢,éCumulusftD[fU,ª1D],Å,à,¢ ,éDêD‡,ÍDAfJf^fDfOftf@fCf<,ðfRfsD[,Ü,½,Í<sup>0</sup>U"®,μ,È,¢,Å,,¾,³,¢DB,± ,ÌDêD‡DAfJf^fDfO,ª''j'<sup>1</sup>,·,é,¨,»,ê,ª, ,è,Ü,·DB

 $fJf^{f}_{0}, \delta fRfs_{0}, \cdot, e'O, E_{0}, f_{0}fOfEfBf"fhfE, \delta \bullet \hat{A}, \P, \ddot{A}_{0}f_{0}f, f\check{S}, E \bullet \hat{U}\check{S}C, {}^{3}, \hat{e}, {}^{1}_{2} \bullet \ddot{I}_{0}X, \delta, \cdot, \times, \ddot{A} \bullet \hat{U}' \P, \mu, \ddot{A}, {}^{3}_{4}, {}^{3}_{4}, \dot{A}$ 

{button ,AL(`administrator',0,`',`')} <u>ŠÖ~A□€–Ú</u>

# <sup>[]</sup>Cumulus,ÌŠÇ—[] fJf^f[]fO,Ì∙ªŠ"

 $\check{Z}\ddot{Y},\dot{l},\varpi,\mathtt{x},\dot{E}\_o<\mu,\dot{A},\dot{I}\_A1,\hat{A},\dot{I}_Jf^f\_f\_fO,\delta2,\hat{A}\_A,\ddot{U},\frac{1}{2},\dot{I},\mathtt{x},\hat{e}^{\dot{E}}\_\tilde{a},\dot{E}\bullet^{\underline{a}}\check{S},,\cdot,\acute{e},\dot{l},\underline{a}\_D,\ddot{U},\mu,\downarrow\_\hat{e}\_\ddagger,\underline{a},\ \dot{e},\ddot{U},\cdot\_B$ 

- I fJf^f□fO,ª'å,«,·,¬,é□BCumulus,Ì1,Â,ÌfJf^f□fOftf@fCf<,Ì—e—Ê,Í□Å'å2 GB,Å,·□B</p>
- I fJf^f□fO,ɕۊÇ,µ,Ä,¢,éfŒfR□[fh,Ì□",ª'½‰ß,¬,é,½,ß□ACumulus,Ì□«"\,ª<É'[,É'á ‰º,µ,Ä,µ,Ü,¤□B</p>

fJf^f□fO,𕪊",·,é□ê□‡,ĺ□A,Å,«,é,©,¬,è~\_—□"I,É□A•ª,©,è,â,·,•ª—Þ,μ,Ä,,¾,3,¢□BŽŸ,Ì,¢ ,\_,ê,©,Ì•û-@,ÅfJf^f□fO,𕪊",Å,«,Ü,·□B

- $$\label{eq:linearcond} \begin{split} 1,\hat{A},\hat{I}Jf^f_{D}fO, @, \varsigma f @ f R_{1}[fh, \eth, \diamondsuit, A, @, U, \mathcal{A}, B, A'I'\eth, \mu_Afhf \\ \% f b f O & f h f_{D}f b f v, A \bullet \hat{E}, \hat{I} f J f^{-} f O, E' U'' @, , . , e_{B} \end{split}$$
- I ftf@fCf<f[]fjf...[[,©,ç[<u>[',«[o,µ/"Ç,Ý[]ž,Ý]</u> ,ð'l'ð,µ[]Af]f^f[]fO,Ì'å•"•ª,ÌfŒfR[[[fh,ð^ê"x,É^Ú"®,·,é[]B

{button ,AL(`administrator',0,`',`')}  $\underline{\check{SO}^{\sim}A\square \in -\acute{U}}$ 

# <sup>[]</sup>[]Cumulus,ÌŠÇ—[] []f^f⊡f0,ÌŒ‹[]‡

 $flf\check{S}fWfif{ft}@fCf{,}\check{\delta}\bullet\ddot{l}^{m}{}^{3,1},\_,\acute{E}flf^{f}fd{}^{f}O,\check{\delta}fRfsd{}^{l}A\bullet \check{a}\check{S}, add (add the address address$ 

fJf^f\_f0,ÌfJfefSfŠ,ÆfŒfR[[fh,ð•Ê,ÌfJf^f\_f0,ÉfRfs][,·,é,±

,Æ,É,æ,è[ĺĂŹ,Ấ^È□ã,ÌfJ́f^ḟ́⊡fO,ð1,Ấ,ĬfJf́^f͡⊡fO,ÉŒ<□‡,Å,«,Ü,·□BfJfefSfŠ,ÆfŒfR□[fh,ðfRfs□[,·,é•û-@,ÍŽŸ,Ì"ñ'Ê,è, ,è,Ü,·□B

□ fhf‰fbfO&fhf⊡fbfv

$$\label{eq:linear_states} \begin{split} & [\underline{\square', \ll \square o, \mu / ``C, Y \square \check{z}, \check{Y}] fRf} f``fh, \check{o}`l`\check{o}, \cdot, \acute{e} \square B \end{split}$$

2,Â^È<code>[]</code>ã,ÌfJf^f<code>[]</code>fO,ðŒ<<code>[]</code>‡,·,é<code>[]</code>ê<code>[]</code>‡,Ì<K'¥

- SefJf^f□fO,É'¶□Ý,,,éfJfefSfŠ,Ì-¼□Ì,ªŒÂ•Ê,Ì,à,Ì,Å,,è□AfŒfR□[fh,ª□d•i,µ,Ä,¢,È,¢□ê□‡,Í□A'P□f,ɕЕû,ÌfJf^f□fO,©,çŒ<□‡□æ,ÌfJf^f□fO,ÉfŒfR□[fh,ðfhf‰fbfO&fhf□fbfv,,é□B</p>
- I fJf^f□fOŠÔ,Å<¤'Ê,Ì-¼□Ì,ðŽ□,ÂfJJfefSfŠ,ª'¶□Ý,·,é,ª□AfŒfR□[fh,âŠK'w,Í^Ù,È,é□ê□‡,Í□AŠefJfefSfŠ,ðŒÂ•Ê,É^Ú"®,·,é □B
- ŠefJf^f[]fO,É'¶[]Ý,·,éfJfefSfŠ,Ì-¼[]ì,ªŠ®'S,É^Ù,È,é[]ê[]‡,Í[]A'P[]f,É,·,×,Ä,ÌfJfefSfŠ,ð[]V<KfJfefSfŠ,ÉfRfs[][,·,é[]B</p>

{button ,AL(`administrator',0,`',`')} <u> $\dot{SO^{-}A\square \in -\dot{U}}$ </u>

# ÜCumulus,ÌŠÇ—[] []î∙ñ,ÌfA[[fJfCfu

### ftf@fCf<,ðfA[[fJfCfu,·,é^ê"ÊŽè[]‡,ĺŽŸ,Ì,Æ,¨,è,Å,·[]B

- $1. fA\_[f]fCfu, \cdot, \acute{e}ftf@fCf <, \delta\_A\_V < Kf\_fffBfA, \acute{e}fRfs\_[, ``, æ, \tilde{N}\_A, Ü, \frac{1}{2}, \acute{l}`Ú'` ®, \mu, \ddot{A}, , \frac{3}{4}, ^3, ¢\_B$
- fA□[f]fCfu—p,Ìf]f^f□fO,ð□ì□¬,μ□Af]fefSfŠ□AfŒfR□[fh,Ì□‡,ÉfRfs□[,μ□AfA□[f]fCfo p,Ìf]f^f□fO,ÉŒ<□‡,μ,Ä,,¾,³,¢□B□Ú□×,É,Â,¢,Ä,Í□A<u>[f]f^f□fO,ðŒ<□‡,∴é]</u>,ðŽQ□Æ,μ,Ä,,¾,³,¢□B
- 3.  $\mathbb{C}_{\pi}$  3

'¼,Ì"Ç,Ý,Æ,è<code>D</code>ê—pf<code>DffBfA,Æ"<sup>-</sup>—IDACD-ROM,ÉfADIfJfCfu,ðD</code>D<sup>-</sup>,·,é,É,ÍDAŽ-'O,É,·,×,Ä,ÌDî•ñ,ªD³,µ,DÝ'è,³,ê,Ä,¢,È,<sup>-</sup>,ê,Î,È,è,Ü,¹,ñ<code>D</mark>B<u>CD-ROM,É,ÍMacintoshftf@fCf<,Å,àWindowsftf@fCf<,Å,à</u>•Û'¶,Å,«,Ü,·DB</code>

### CD-ROM,ÅfA[[f]fCfu,ð[]`[¬,·,é[]ê[]‡,Í[]AŽŸ,ÌŽè[]‡,É[]],Á,Ä,,¾,³,¢[]B

- 1. fef"f|f‰fŠ,Èf{fŠf...□[f€/fhf‰fCfu,ð□ì□¬,μ□A□Å□I"I,ÈCD-ROM,Ì-¼'O,ð•t,<sup>-</sup>,Ä,,¾,³,¢□B
- fA□[f]fCfu,·,éf]f^f□fO,¨,æ,Ñftf@fCf<,ð□Af{fŠf...□[f€/fhf ‰fCfu,ÉfRfs□[,¨,æ,Ñ□A,Ü,½,ĺ^Ú"®,µ,Ä,,¾,,3,¢□B
- 3.  $fA [[f] fC fu f] f^{f} f0 a, Å, \cdot, \times, \ddot{A}, \dot{f} f f f f f f f f f f, \delta [X V, \mu, \ddot{A}, , 34, 3, c] B$
- f{fŠf...□[f€/fhf‰fCfu,Ì"à—e,ªŠÜ,Ü,ê,Ä,¢,é□V<KCD,ð□ì□¬,µ,Ü,·□BCD,Ì-¼□Ì,Í□Af{fŠf...□[f€/ fhf‰fCfu,Ì-¼□Ì,Æ"<sup>-</sup>,¶,Å, ,é"\_,É'□<sup>^</sup>Ó,µ,Ä,,¾,3,¢□B

{button ,AL(`administrator',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

### 

Macintoshftf@fCf<,ÆWindowsftf@fCf<,Ì—¼•û,ðCD-ROM,ÉfA□[fJfCfu,·,é□ê□‡□A•K,¸ŽŸ,Ì,¢ ,\_,ê,©,Ìftf@fCf<fVfXfef€,Ì'g,Ý□‡,í,¹,ðŽg—p,μ,Ä,,¾,³,4□B

- ISO 9660ftf@fCf √fVfXfef€□iJolietŠg'£ftf@fCf •t□j,ÆMacOS HFSftf@fCf √fVfXfef€ ,ðŠÜ,ÞfnfCfufŠfbfhCD-ROM
- ISO 9660 CD-ROM□iJolietŠg'£ftf@fCf<,È,μ□j</p>

[]ã<L^ÈŠO,Ì'g,Ý[]‡,í,¹,ðŽg—p,μ,½[]ê[]‡[]AOSfVfXfef€,Ì-½-¼<K−ñ,ªŒ´^ö,μ[]A,Ç,¿,ç,©,Ìfvf ‰fbfgftfH[[[f€[]ã,Åftf@fCf<,ÌŒŸ[]õ,ÉŽx[]á,ª[]¶,¶,Ü,·[]B

{button ,AL(`administrator',0,`',`')}  $\underline{\check{SO}^{-}A_{\Box} \in -\acute{U}}$ 

# <sup>[]</sup>Cumulus,ÌŠÇ—[] fJf^f⊡fO,Ì'ljÁ

Šù'¶,ÌfJf^f□fO,ðf†□[fU,ªŽg—p‰Â"\,ÈfJf^f□fO,ÌfŠfXfg,É'ljÁ,Å,«,Ü,·□B

# ſJf^f□fO,ð'ljÁ,∙,é,É,ĺ

- $1. \ ftf@fCf {f_fj} ... [[, @, c[fT][fo, E]U' ±], \delta'I' \delta, \mu, A]A[OK], \delta fNfSfbfN, \mu, U, \cdot]B$
- ['ljÁ],ðfNfŠfbfN,µ,Ü,·□B
  [f]f^f□fO,ð'ljÁ]f\_fCfAf□fOf{fbfNfX,ªŠJ,«,Ü,·□B
- 3. Šù'¶,ÌfJf^ff[fO,Ì-¼'O,Æftf<fpfX,ð"ü—Í,µ,Ü,· $\Box$ B
- 4. [OK],ðfNfŠfbfN,μ,Ü,∙∏B

{button ,AL(`administrator',0,`',`')}  $\underline{\check{S}O^{-}A\square \in -\acute{U}}$ 

#### □Cumulus,ÌŠÇ fJf^f□f0,ÌfŠfXfgfA

Ž-'O,ÉfofbfNfAfbfv,µ,½ftf@fCf‹,ð[]A[]Ä"xŒ³,ÌfJf^f[]fO,É-ß,·,±,Æ,ð[fŠfXfgfA],ÆŒÄ,Ñ,Ü,·[]B

# fJf^f⊡fO,ðfŠfXfgfA,∙,é,É,Í

- $1. ftf@fCf < f[]fjf...[[, ©, c[fT[][fo, É][Ú' ±], ð'l'ð, \mu, Ä]]A[OK], ðfNfŠfbfN, \mu, Ü, ·]]B$
- [fŠfXfgfA],ðfNfŠfbfN,μ,Ü,·□B
  [fJf^f□fO,ÌfŠfXfgfA]f\_fCfAf□fOf{fbfNfX,ªŠJ,«,Ü,·□B
- [fofbfNfAfbfvftf@fCf<, lfpfX-¼]ftfB□[f<fh,É□AfofbfNfAfbfvftf@fCf<, l-¼'O,Æftf<fpfX,ð"ü ĺ,µ,Ü,·□B fofbfNfAfbfvftf@fCf<, lŠg'£Žq, ĺ.bak,Å,·□B</li>
- 4. [fŠfXfgfA]æ,ÌfpfX-¼]ftfB][f<fh,É]AfofbfNfAfbfvftf@fCf<,@,c]ì]¬,·,éfJf^f]fO,Ì-¼'O,Æftf<fpfX,ð"ü—Í,µ,Ü,·]B
- 5. [OK],ðfNfŠfbfN,μ,Ü,∙∏B

{button ,AL(`administrator',0,`',`')}  $\underline{\check{S}O^{-}A\square \in -\acute{U}}$ 

# ÜCumulus,ÌŠÇ—∏

**fJf^f□fO,Ì□C•œ** fJJf^f□fO,ª‰ó,ê,Ä,¢,é□ê□‡□A[□C•œ]fRf}f"fh,ðŽg,Á,Ä□C•œ,·,é,± ,Æ,ª,Å,«,Ü,·□BfJf^f□fO,Ì□C•œ,É,©,©,鎞ŠÔ,Í□AfJf^f□fO,ÌfTfCfY,É,æ,Á,Ä^Ù,È,è,Ü,·□B

## fJf^f□fO,ð□C•œ,∙,é,É,Í

- 2. [OK],ðfNfŠfbfN,μ,Ü,·□B

{button ,AL(`administrator',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€–Ú</u>

Šî-{'€∏ì

$$\label{eq:cumulus,delta} \begin{split} & \underline{Cumulus,delta} (N'' \circledast,\mu,\ddot{A}f)f^f_{\Box}fO,delta S, \underline{A}, \underline{$$

# ŪŠî-{'€⊡ì Cumulus,ð<N"®,μ,ÄfJf^f⊡fO,ðŠJ,

<u>fJf^f□fO</u>,Í□ACumulusfAfvfŠfP□[fVf‡f",Ì<N"®Žž,ÉŠJ,,±,Æ,ª,Å,«,Ü,·□B

### Cumulus,ð<N"®,µ,ÄfJf^f□fO,ðŠJ,,É,ĺ^ȉº,ÌŽè□‡,É□],¢,Ü,·

- [fXf^□[fg]f{f^f",ðfNfŠfbfN,µ,Ä[fvf□fOf‰f€],ðf|fCf"fg,µ□A[Cumulus]□A[Cumulus Browser] ,Ì□‡,É'l'ð,µ,Ä,,¾,,4□B
- 2. Cumulus,  $a < N \in \mathbb{R}, a < b \in \mathbb{R}, b \in$

\_\_ÅŒã,ÉCumulus,ð□l—¹,μ,½,Ӕ,«,ÉfJf^f□fO,ªŠJ,¢,Ä,¢,È,¢,©□A,Ü,½,ĺ[ŠJ,]f\_fCfAf□fO,ª•\ ަ,³,ê,È,¢□ê□‡□Aftf@fCf<f□fjf...□[,©,ç[ŠJ,],ð'l'ð,μ,Ä□A[ŠJ,]f\_fCfAf□fOf{fbfNfX,ð•\ަ,μ,Ü,·□B

3.  $f \tilde{S} f X f g, @, c f J f^{D} f O, \delta' I' \delta, \mu, \ddot{A} O K, \delta f N f \tilde{S} f b f N, \mu, \ddot{U}, \Box B$ 

**'□:** CumulusfZfbfVf‡f"'†,É•Ê,ÌfJf^f□fO,ðŠJ,,É,Í□Aftf@fCf‹f□fjf...□[,©,ç[ŠJ,],ð'l'ð,μ,Ä□AfJf^f□fO-¼,ð'l'ð,μ,Ü,·□BŠJ,¢,½fJf^f□fO,ð•Â,¶,é,É,Í□Aftf@fCf‹f□fjf...□[,©,ç[•Â,¶,é],ð'l'ð,μ,Ü,·□B

 $\label{eq:linear_state} $$ \hat{A} < ... \hat{E} Cumulus NetworkfT[[fo, a], \hat{e}, \hat{D} ACumulusfNf $$ fCfAf"fg, &, \mu, \ddot{A} AfT[[fo, ff]fOfIf", \mu, \ddot{A} fIfbfgf] $$ fCfAf"fg, &, \mu, \ddot{A} AfT[[fo, ff]fOfIf", \mu, \ddot{A} fIfbfgf] $$ fCfAf"fg, &, \mu, \ddot{A} AfT[[fu, ff]fOfIf", \mu, \ddot{A} fIfbfgf] $$ fCfAf"fg, &, \mu, \ddot{A} AfT[[fu, ff]fOfIf", \mu, \ddot{A} fIfbfgf] $$ fCfAf"fg, &, \mu, \ddot{A} A, a, \ddot{U}, \dot{B}, \pm, \hat{e}, \delta A, a, \dot{A}, a, \dot$ 

'□□FCumulus Browser,ª"<sup>-</sup>Žž,ÉŠJ,,±,Æ,Ì,Å,«,éfJf^f□fO,Í□A□Å□,2,Â,Ü,Å,Å,·□B

{button ,AL(`basics',0,`',`')} <u>ŠÖ~A $\Box$ €-Ú</u>

# <sup>[]</sup>گî-{'€]ì f]f^f⊡fO,ð•Â,¶,é

 $\check{S}J, \ensuremath{\varepsilon}, \ensuremath{\frac{1}{2}} f]f^f[]fO, \ensuremath{\delta} \bullet \hat{A}, \ensuremath{\P}, \ensuremath{\epsilon}, \ensuremath{\frac{1}{2}} f]f^f[]ff^f$ 

# ¥£)-{'€]ì Cumulus,Ì]I—

 $Cumulus, \delta[]I_{,\cdot}, \acute{e}, \acute{E}, \acute{I}[Aftf@fCf < f[]fjf...[[, ©, c[[]I_{,}], \delta'I' \delta, \mu, Ü, \cdot]]B$ 

# ÜŠî-{'€]ì CumulusfAfvfŠfP][fVf‡f"fEfBf"fhfE

 $\begin{array}{l} CumulusfAfvfŠfP[[fVf‡f"fEfBf"fhfE,É,Í[]Aftf@fCf<,ðf]f^f[]fO,\mu,½,蕪--P,·,é,½,ß,É•K--v,È,·,×,Ä,ÌfRf}f"fh[AflfvfVf‡f"[]AfEfBf"fhfE,ªŠÜ,Ü,ê,Ä,¢,Ü,·[]BfEfBf"fhfE,ÌflfvfVf‡f",Ì,¢,-,Â,©(,Ù,Æ,ñ,Ç,Ìfc[][f<fo][f{f^f"]AŒŸ[]õfc[][f<fo][[]AfXfe][f^fXfo][]), í[]Af<u>ff^f[]fOftf@fCf<,ª"Ç,Ý[]ž,Ü,ê,Ä,¢,é</u>,Æ,«,É,¾, ¯fAfNfefBfu,É,È,è,Ü,·[]B$ 

 $\begin{array}{l} CumulusfAfvfŠfP[[fVf\sharpf"fEfBf"fhfE,l]d=v,ÈŠefp[[fg,ð^ȉº,Å]à=¾,\mu,Ü,·]B,±,ê,ç,lfp[[fg,ð•\Ž|f]]fj...][,Åf`fFfbfN,Ü,½,ĺf`fFfbfN‰ð]œ,·,é,±,Æ,É,æ,Á,Ä]A,Ç,l=v'f,ð•\Ž|,³,¹,é,©,ðfRf"fgf][[f<,Å,«,Ü,·]B \end{array}$ 

f□fjf… □[fo□[	,·,×,Ä,ÌCumulusfRf}f"fh,ðŠÜ,Þf□fjf□[,ð•\ ަ,µ,Ü,·□B‰⁰□ü,Ì, ,é•¶Žš,ĺfL□[f{□[fh□EfVf‡□[fgfJfb fg,Å,·□BfL□[f{□[fh□EfVf‡□[fgfJfbfg,ðŽg— p,·,é,É,Í□Af□fjf□[,ð•\ަ,µ,Ä ‰⁰□ü•¶Žš,ðf^fCfv,µ,Ü,·□B
fc□[f <fo □[</fo 	,æ,Žg— p,³,ê,éfRf}f"fh,¨,æ,ÑflfvfVf‡f",Ö,ÌfVf‡□[fgf]fbfg,Å, , éf{f^f",ª•À,ñ,Å,¢,Ü,·□Bf{f^f",Ì <u>fc□[f<f`fbfv< u="">,ð•\ ަ,·,é,É,Í□Af}fEfX,ðf{f^f",Ì□ã,É'u,«,Ü,·□B□Ú□×,Í□u <u>fc□[f<f`fbfv,ìžg—p< u="">.□v,ðŽQ□Æ,µ,Ä,,¾,³,¢□B</f`fbfv,ìžg—p<></u></f`fbfv<></u>
ŒŸ∏õfc ∏[f∢fo∏[	15Ží— Þ,Ì <code>]</code> ðŒ <code>],ðʻg,Ý</code> ]‡,í,¹,ÄʃJf^ƒ[]fO,ðŒŸ <code>]</code> ፬,Å,«,Ü,·]B <code>]Ú <code>]×,Í</code>[lu<u>ŒŸ]፬ốc<code>][f<fo][,ìžg—p< u="">]v,ðŽQ]Æ,μ,Ä,- ,¾,³,¢]B</fo][,ìžg—p<></code></u></code>
fJfefSfŠ fŠfXfgf EfCf"fh fE	fJf^f□fO,É"o <sup>~</sup> ^,μ,½,·,×,Ä,ÌfJfefSfŠ,ÌfŠfXfg,Å,·□B□Ú □×,Í□u <u>fJfefSfŠfŠfXfgfEfBf"fhfE,ÌŽg—</u> ϼ□v,ðŽQ□Æ,μ,Ä,,¾,³,¢□B
fJf^f⊡f OfEfBf" fhfE	<u>fJfefSfŠfXfgfEfBf"fhfE</u> ]i]¶'¤]j,Æ <u>fŒfR][fhfEfBf"f</u> <u>hfE</u> ]i ‰E'¤[]j,Ì2,Â,ÌfEfBf"fhfE,Ì']]]Ì,Å,·]B]Ú]]×,ĺ[]u <u>f]f^f]f</u> <u>OfEfBf"fhfE,ð—]‰ð,·,é</u> ]v,ðŽQ]Æ,μ,Ä,,¾,3,¢]]B
fŒfR⊡[ fhfEfBf "fhfE	fŒfR□[fh,ð <u>fTf€flfCf&lt;</u> ,Ü,½,ĺfŠfXfg,Æ,µ,Ä•\ ަ,µ,Ü,·□BfŒfR□[fh,É,ĺ□AfJf^f□fO,³,ê,½ŠeflfŠfWfif< ,É,Â,¢,Ä,Ì□d— v,È□ĵ•ñ,ª•Û'¶,³,ê,Ü,·□B□Ú□×,ĺ□u <u>fŒfR□[fhfEfBf"fhf</u> <u>E,ÌŽg—p</u> □v,ðŽQ□Æ,µ,Ä,,¾,³,¢□B
fXfe□[f ^fXfo□ [	fc[[f <fo[[f{f^f",ì[]à-¾,ð•\ ަ,µ[]A[]ufAfvfŠfP[][fVf±f"[]Ý'è[]vf_fCfAf[]fOf{fbfNfX []Af]fefSfŠ[]Á,¨,æ,ÑfŒfR[][fh,Ö,ÌfAfNfZfX,ð'ñ&lt;Ÿ,µ,Ü ,·[]B[]Ú[]×,Í[]u<u>fXfe[][f^fXfo[[,ÌŽg—</u> p[]v,ðŽQ[Æ,µ,Ä,,¾,³,¢[]B</fo[[f{f^f",ì[]à-¾,ð•\ 

{button ,AL(`basics',0,`',`')}  $\underline{SO^{A} \square \in -U}$ 

<sup>∭</sup>Šî-{'€<u>□</u>ì fc□[f<fo□[,ÌŽg—p

 $\begin{array}{l} fc [[f < fo [[,] f {f^f", \delta Zg - p, \cdot, e, I ] A, &, Zg - p, \cdot, e f Rf } f"fh, a f lfvfVf f f", \delta, \cdot, I, a, S E'P, E - ~ - p, A, &, U, \Bf J [[f < f <, \delta f c [[f < fo [[,] f {f^f", I ] a, E^U (" B, \cdot, e, AE ] A, &, I f {f^f", I < } a^{24}, \cdot, e f c [[f < fo [[,] f {f^f", I ] a, E^U (" B, \cdot, e, AE ] A, &, I f {f^f", I < } a^{24}, \cdot, e f c [[f < fo [[,] f {f^f", I ] a, E^U (" B, \cdot, e, AE ] A, &, I f {f^f", I < } a^{24}, \cdot, e f c [[f < fo [[,] f {f^f", I ] a, E^U (" B, \cdot, e, AE ] A, &, I f {f^f", I < } a^{24}, \cdot, e f c [[f < fo [[,] f < fo [] f <$ 

fc[[f‹fo[[,ĺ[ACumulusfAfvfŠfP[[fVf‡f"fEfBf"fhfE,Ì[]ã'¤[]A‰º'¤[]A[]¶'¤[]A‰E'¤,Ì,¢ ,\_,ê,©,É"z'u,·,é,©[]A"Æ—

§,μ,½ftf□□[fefBf"fOfEfBf"fhfE,É,·,é,©,ð'l'ð,Å,«,Ü,·□Bfc□[f<fo□[,ð^Ú"®,·,é,É,Í□A~g,ð'l'ð,μ,Ä□ã ‰º□¶‰E,Ì,¢, \_,ê,©,Ì□ê□Š,Éfhf‰fbfO,μ,Ü,·□B^ꎞ"I,Éfc□[f<fo□[,ð"ñ•\ަ,É,·,é,É,Í□A[•\ަ]f□fjf... □[,Ì[fc□[f<fo□[],Ìf`fFfbfNf}□[fN,ðŠO,μ,Ü,·□B

fc[[f <fo[[,ìf{f ^f"</fo[[,ìf{f 	<b>]à-¾</b>
₽	CumulusfT□[fo□iComulus Network□j,É□Ú'±,μ,Ü,·□B
ж	ʻl'ð•"•ª,ð□Ø,èŽæ,è□AfNfŠfbfvf{□[ fh,ÉfRfs□[,μ,Ü,·□B
	ʻl'ð∙"∙ª,ðfNfŠfbfvf{□[fh,ÉfRfs□[,μ, Ü,·□B
	ʻl'ð∙"∙ª,ÉfNfŠfbfvf{□[fh,Ì"à— e,ð'}"ü,μ,Ü,·□B
	<u>fJfefSfŠfŠfXfgfEfBf"fhfE</u> ,ð∙\ ަ,Ü,½,Í"ñ∙\ަ,μ,Ü,∙ <u>□</u> B
	<u>fTf€flfCf&lt;</u> f,□[fh192□~192,Åftf@fCf <,ð•\ަ,µ,Ü,·□B
8	<u>fTf€flfCf&lt;</u> f,□[fh128□~128,Åftf@fCf<,ð•\ ަ,µ,Ü,·□B
	<u>fTf€flfCf‹</u> f,□[fh96□~96,Åftf@fCf‹,ð∙\ ަ,µ,Ü,· <u>□</u> B
	fŠfXfgf,□[fh,ð∙\ަ,μ,Ü,·□B
<sup>+</sup> a	fŒfR□[fh−¼,ðŠî□€ ,É,µ,ÄfJf^f□fO,ðf\□[fg,µ,Ü,·□B
<b>*™</b>	<u>ftf@fCf</u> <Œ`Ž®,ðŠî <u>∏</u> € ,É,µ,ÄfJf^f∏fO,ðf\∏[fg,µ,Ü,·∏B
+, <b>1</b>	ftf@fCf‹,̉摜f,□[fh,ðŠî⊡€ ,É,µ,ÄfJf^f□fO,ðf\□[fg,µ,Ü,·□B
*8	ftf@fCf‹,Ì <u>‰ð'œ"x</u> ,ðŠî∏€ ,É,µ,ÄfJf^f∏fO,ðf\[[fɡ,µ,Ü,·[]B
+==	ftf@fCf‹,Ì□C□³"ú,ðŠî□€ ,É,µ,ÄfJf^f□fO,ðf\□[fg,µ,Ü,·□B



{button ,AL(`basics',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

# <sup>ل</sup>۩Šî-{'€]ì fJf^f□fOfEfBf"fhfE,É,Â,¢,Ä

 $\label{eq:cumulus} Cumulus, iftf@fCf<, \deltafjf^ff0, & & & A^2(0,0,0) \\ \mathcal{E}_{1,0}^{\mathcal{E}_{1,0}} = \mathcal{E}_{1,0}^{\mathcal{E}_{1,0}} + \mathcal{E}_{1,0}^{\mathcal{E}_{1,0}} +$ 

fJf^f□fOfEfBf"fhfE,Í□AŽŸ,Ì2,Â,Ì•"•ª,Å□\□¬,³,ê,Ü,·□B

□E <u>f]fefSfŠfŠfXfgfEfBf"fhfE</u>

□E <u>fŒfR□[fhfEfBf"fhfE</u>

 $\begin{array}{l} ftf@fCf <, \delta fJf ^ fDfO, \cdot, é, \end{tabular} ftf@fCf <, \delta fJf ^ fDfO, \cdot, é, \end{tabular} ftf@fCf <, \delta fJf ^ fDfO, \dot{e} < \end{tabular} ftf@fCf <, \delta fJf ^ fDfO, \dot{e} < \end{tabular} ftf \end{tabular} ftff \end{tabular} ftf \end{tabular} f$ 

$$\begin{split} SHIFTfL[[,ð‰Ÿ,\mu,È,ª,çTABfL[][,ð‰Ÿ,·,Æ]AfAfNfefBfu,ÈfEfBf"fhfE,ð]Ø,è'Ö,¦,é,± ,Æ,ª,Å,«,Ü,·]B,Ü,½fJf^f]fOfEfBf"fhfE,Ì't‰>,É, ,é<«ŠE,ð'l'ð,µ,Ä]AŠefEfBf"fhfE,Ì•\ Ž\"Í^Í,ð•Ï]X,·,é,±,Æ,ª,Å,«,Ü,·]BfEfBf"fhfE'S'Ì,ÌfTfCfY,ð•Ï]X,·,é,É,Í]AfEfBf"fhfE,Ì<«ŠE,ðfhf ‰fbfO,·,é,©]Af^fCfgf<fo][,É, ,é]Å]¬‰»]A[]Å'剻]A•œŒ³,Ìf{f^f",ðŽg—p,µ,Ü,·]B$$

{button ,AL(`basics',0,`',`')}  $\underline{SO^{A} \square \in -U}$ 

# fJf^f□fOfEfBf"fhfE



# <sup>∭</sup>Šî-{'€]ì fXfe][f^fXfo][,ÌŽg—p

fXfe[[f^fXfo[[,Í[]ACumulusfAfvfŠfP[][fVf‡f"fEfBf"fhfE,̉º•",É•\ަ,³,ê,Ü,·[]B

🐟 10 🖊 13 ከታጋህ	10 / 10 VI-N	■ //.
----------------	--------------	-------

fXfe[[f^fXfo[[,Ì[]¶'[,É,Í[]Afc[[f<fo[[f{f^f",Ì[]à-¾,ª•\ަ,³,ê,Ü,·[]B[]à-¾,ð•\ ަ,·,é,É,Í[]Afc[][f<fo[[f{f^f",Ì[]ã,Éf][][f\f<,ð^Ú"®,μ,Ü,·[]B

,»,̉¡,É,Í□A<u>ŒŸ□õfRf"fpfX</u>,ª•\ަ,³,ê,Ü,·□B,± ,ÌfAfCfRf",ðfNfŠfbfN,·,é,Æ□AfAfvfŠfP□[fVf‡f"ŠÂ‹«□Ý'èfEfBf"fhfE,ª•\ ަ,³,ê□AfJfefSfŠŒŸ□õ,Ì□Ý'è,ª,Å,«,Ü,·□B

fJJfefSfŠfXfe□[f^fXftfB□[f<fh,É,Í□AfJfefSfŠfŠfXfgfEfBf"fhfE,É•\ަ,³,ê,Ä,¢ ,éfJfefSfŠ,ÌŒÂ□",Æ□AŒ»□Ý,ÌfJf^f□fO,ÉŠÜ,Ü,ê,éfJfefSfŠ,Ì'□□",ª•\ަ,³,ê,Ü,·□B,½,Æ,¦,Î□A[19/ 105fJfefSfŠ (1'I'ð)],Í^ȉº,Ì,æ,¤,È^Ó-¡,É,È,è,Ü,·

□E fJf^f□fOfEfBf"fhfE,É19ŒÂ,ÌfJfefSfŠ,ª•\ަ,³,ê,Ä,¢,é

□E Œ»□Ý,ÌfJf^f□fO,É□‡Œv105ŒÂ,ÌfJfefSfŠ,ªŠÜ,Ü,ê,Ä,¢,é

□E 1ŒÂ,ÌʃJfefSfŠ,ª'l'ð,³,ê,Ä,¢,é

fŒfR[[fhfXfe][f^fXftfB][f<fh,É,Í[]AŒ»[]Ý,Ìf]f^f[]fO,ÅŒŸ[]õ,³,ê,½fŒfR[[fh[]",ÆfŒfR[[fh,Ì'[]]",ª• \ަ,³,ê,Ü,·[]BŒŸ[]õŒã,É,Í[]AŒŸ[]õ[]ðŒ[],É^ê′v,µ,½fŒfR[][fh[]",ª•\ަ,³,ê•Ö— ~,Å,·[]B,½,Æ,¦,Î[]A[25/ 1173 (1'l'ð)],Í^ȉº,Ì,æ,¤,È^Ó-¡,É,È,è,Ü,·[]B

 $\label{eq:constraint} \begin{array}{c} \label{eq:constraint} \mathbb{E} & 25 \times \hat{A}, \\ \hline & 15 \times \hat{A}, \\ & 15 \times \hat{A}, \\ \hline & 1$ 

□E Œ»□Ý,ÌfJf^f□fO,É□‡Œv1173ŒÂ,ÌfŒfR□[fh,ª, ,é

□E 1ŒÂ,ÌfŒfR□[fh,ª'l'ð,³,ê,Ä,¢,é

{button ,AL(`basics',0,`',`')}  $\underline{SO^{A} \square \in -U}$ 

# <sup>ل</sup>ا§`-{'€]ì fŒfR][fhfEfBf"fhfE,ÌŽg—p

fŒfR□[fhfEfBf"fhfE,É,Í□AŒ»□Ý,ÌfJf^f□fO,ÉŠÜ,Ü,ê,éfŒfR□[fh,ª•\ ަ,³,ê,Ü,·□BffftfHf<fg,Å,Í□AfŒfR□[fh,Í<u>fTf€flfCf<</u>,Æ,µ,Ä•\ ަ,³,ê,Ü,·□BŠefŒfR□[fh,É,Í□AŒ³,Ìftf@fCf<,ÉŠÖ,·,é□î•ñ,ª•Û′¶,³,ê,Ä,¢,Ü,·□B•\ަf□fjf... □[,Å<u>fŒfR□[fh,Ì•\ަ•û-@,ð•ï,¦,é</u>,±,Æ,ª,Å,«,Ü,·□B

ffftfHf‹fg,Å,Í□AfTf€flfCf‹,Ì□^‰º,ÉfŒfR□[fh-¼,ª•\ަ,³,ê,Ü,·□B□Å'å,Å63•¶Žš□i"ú-{ΐ,Ì□ê□‡,Í32•¶Žš,Ü,Å□j,ÌfŒfR□[fh-¼,ðŽg—p,·,é,±,Æ,ª,Å,«,Ü,·□B□Ú□×,Í□u<u>fŒfR□[fh-</u> <u>¼,Ì•Ò□W</u>□v,ðŽQ□Æ,µ,ĉº,³,¢□B

fŒfR□[fh,É,Â,¢,Ä,Ì□î•ñ,ð•\ަ,·,é,É,Í□AfTf€flfCf<,Ì□ã,ÉfJ□[f\f<,ð'u,-,Æ□A□Ú□×□î•ñfEfBf"fhfE,ªŒ»,í,ê□AfŒfR□[fh,É•t,¢,Ä,Ì□î•ñ,ª•\ަ,³,ê,Ü,·□B,± ,Ì'¼,É□A<u>fTf€flfCf<,Ì□Å"K‱»</u>,à,Å,«,Ü,·□B

fŠfXfgf,□[fh,Å,ĺ□AfJf^f□fOfEfBf"fhfE,ÉfŒfR□[fh-¼□AŒ`Ž®□A‰æ'œf,□[fh□A ‰ð'œ"x□A,¨,æ,Ñ□C□³"ú,ªfŠfXfg,³,ê,Ü,·□BŠe—ñ,Ì•□,ĺ□A —"Œ©□o,µ,ÌŠÔ,Ì•ªŠ"fo□[,ð'²□®,µ,ÄfTfCfY•Ї□X,Å,«,Ü,·□B

fŒfR□[fh□î•ñ,ĺ□A<u>[fŒfR□[fhfvf□fpfefB]f\_fCfAf□f0f{fbfNfX</u>,Æ,¢,¤fEfBf"fhfE,É•\ ަ,³,ê,Ü,·□BfŒfR□[fhfvf□fpfefB,ð•\ަ,·,é,É,ĺ□AfŒfR□[fh,ð'l'ð,µ,Ä,©,ç□AfŒfR□[fhf□fjf… □[,Å[fvf□fpfefB],ðfNfŠfbfN,µ,Ü,·□B[fŒfR□[fhfvf□fpfefB]f\_fCfAf□f0f{fbfNfX,ªŠJ,«,Ü,·□B

fJ□[f\f‹,ðfŒfR□[fhfTf€flfCf‹,Ü,½,ĺfefLfXfg"ü—ĺ,Ì□ã,É^Ú"®,μ,Ä□A ‰Ef}fEfXf{f^f",ðfVf"fOf‹fNfŠfbfN,·,ê,Î□A<u>fŒfR□[fhf|fbf∨fAfbfvf□fjf...□[</u>,ª•\ަ,³,ê,Ü,·□B

"Á'è,ÌfJf^f□fO,ÅŽŸ,Ìf\□[fg,ª,Å,«,Ü,·□B

□E <u>fŒfR□[fh,Ìf\□[fg</u>

**□E** <u>□,□‡,Ü,½,Í□~□‡,Åf\□[fg</u>

{button ,AL(`basics',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€-Ú</u>

### WŠî-{'€]ì I fŒfR][fhfEfBf"fhfE,ÌŽg—p fTf€flfCf‹,Ì]Å"K‰»

# لاًگî-{'€]Ì لاًfŒfR][fhfEfBf"fhfE,ÌŽg—p fŒfR][fh∙\ަflfvfVf‡f" بندانه ه

•\Z¦∙û-@	'€∐ì
fŒfR□[fh,ð192□~192fs fNfZf‹,ÌfTf€flfCf‹,Å•\ ަ,∙,é	[•\ަ]f⊡fjf… □[,©,ç[fTf€flfCf‹f,□[fh 192□~192],ð'l'ð,μ,Ü,·□B
fŒfR□[fh,ð128□~128fs fNfZf‹,ÌfTf€flfCf‹,Å•\ ަ,∙,é	[•\ަ]f⊡fjf… □[,©,ç[fTf€flfCf‹f,□[fh 128□~128],ð'l'ð,μ,Ü,·□B
fŒfR□[fh,ð96□~96fsfN fZf‹,ÌfTf€flfCf‹,Å∙\ަ,·,é	[•\ަ]f⊡fjf □[,©,ç[fTf€flfCf‹f,□[fh 96□~96] ,ð'l'ð,μ,Ü,·□B
fŒfR□[fh,Ì□Ú□×,ðfefLf Xfg,Å∙\ަ,∙,é	[•\ަ]f□fjf□[,©,ç[fŠfXfgf,□[fh] ,ð'l'ð,µ,Ü,·□B

{button ,AL(`basics',0,`',`')} <u>ŠÖ~A□€–Ú</u>

# <sup>ل</sup><sup>™</sup>Šî-{'€]ì <sup>ل</sup>fŒfR][fhfEfBf"fhfE,ÌŽg—p fŒfR][fh,Ìf\][fg

fŒfR□[fh,É,Í□Aftf@fCf<,ÉŠÖ,·,é'½,,Ì□î•ñ,ªŠÜ,Ü,ê,Ä,¢,Ü,·□B[•\ަ]flfvfVf‡f",ð'l'ð,μ,Ä□A^ȉº,Ì□€– Ú,ðŠî□€,É,μ,Äf\□[fg,·,é,±,Æ,ª,Å,«,Ü,·□B

- □E fŒfR□[fh-¼
- □E ftf@fCf<Œ`Ž®
- []E ‰ð'œ"x
- []E ‰æ'œf,[][fh
- □E □C□³"ú

### **□€−Ú,ðŠî□€,É,μ,ÄfŒfR□[fh,ðf\□[fg,**,é,É,Í**□**A^ȉ⁰,ÌŽè**□**‡,É**□],¢,Ü,**·**□**B

- 1. [•\ަ]f□fjf...□[,©,ç[f]f^f□fO,ðf\□[fg],ð'l'ð,μ,Ü,·□B
- [f]f^f□fO,ðf\□[fg],ÌfTfuf□fjf...□[,©,ç□AfŒfR□[fh,Ì□€-Ú(fŒfR□[fh-¼□Aftf@fCf‹Œ`Ž®□A ‰ð'œ"x□A‰æ'œf,□[fh□A□C□<sup>3</sup>"ú),Ì,¢,,ê,©,ð'l'ð,µ,Ü,·□B

<u>fc□[f<fo□[f{f^f"</u>,ðŽg—p,µ,ÄfŒfR□[fh,ðf\□[fg,·,é,±,Æ,à,Å,«,Ü,·□B,Ü,½□Af\ □[fg,Ì<u>□\_□‡,Æ□~□‡,ð"ü,ê'Ö,¦,é</u>,±,Æ,ª,Å,«,Ü,·□B

{button ,AL(`basics',0,`',`')}  $\underline{\check{SO}^{A}} \subseteq -\underline{\acute{U}}$ 

### <sup>ل</sup><sup>ا</sup>لآ) (`€]ì لالآ) لالآ الآر) لالآ) لال

fŒfR[[fhfEfBf"fhfE,ĺ<u>fŒfR[[fh,Ìf\[[fg</u>,Ì]Ý'è,Ì'¼,É],[]‡/[]~[]‡,Ì]Ø,è'Ö,¦,à,Å,«,Ü,·[]B ],[]**‡-",Í**[]~[]**‡,ð**[]Ø,è,©,¦,é,É,Í^ȉº,ÌŽè[]‡,É[]],¢,Ü,·

- 1.  $[\cdot X_{1}]_{1}$
- fTfuf□fjf...□[,©,ç[□,□‡],Ü,½,ĺ[□~□‡],ð'l'ð,μ,Ü,·□B
  □V,μ,¢□‡□<sup>~</sup>,ÅfŒfR□[fh,ª•\ަ,³,ê,Ü,·□B

{button ,AL(`basics',0,`',`')} <u>ŠÖ~A⊡€–Ú</u>

# <sup>ل</sup>ا§`-{'€]ì fJfefSfŠfŠfXfgfEfBf"fhfE,ÌŽg—p

fJf^f[]fOfEfBf"fhfE,Ì[]¶'¤,İ[]AfJ]fefSfŠfŠfXfgfEfBf"fhfE,Ӕ,¢,¢ ,Ü,·]]BfJ]fefSfŠfXfgfEfBf"fhfE,É,İ[]AŒ»[]Ý,ÌJJf^f[]fO,É, ,é,·,×,Ä,ÌJJfefSfŠ-¼,ª•\ ަ,³,ê,Ü,·]]BfJ]fefSfŠ,İ^ê"Ê,É,¢,í,ê,éftfHf<f\_,Ӕ"¯,¶,ӕ,¤,É[]AfŒfR[][fh,ð~\_—[]"I[]\'¢[]A'¼Š ´"I[]\'¢[]A,¨,ӕ,ÑŽg,¢,â,·,¢[]\'¢,É•Ò[]¬,Å,«,Ü,·]]BCumulusft[][fU,Ì'½,,İ[]A,»,ê,¼,ê,ª'½,-,ÌfŒfxf<,ðŽ[],Â[]"]ç,ÌJJfefSfŠŠÜ,ÞfJf^f[]fO,ð[Ì]]¬,µ,Ä,¢,Ü,·]]B

ftf@fCf‹,ðfJf^f[]fO,·,é,Æ[]AfIfŠfWfif‹ftf@fCf‹,ÉŠÖ,·,é[]d v[]î•ñ,ð•Ú'¶,·,éfŒfR[[[fh,ª[]ì[]¬,³,ệ,U,·[]BfŒfR[[[fh,ðf]]fefSfŠ,Æ,¢,¤fL[][f][][fh,ðŠK'w ‰»,µ,½fOf‹[[fv,É•ª—Þ,·,é,±,Æ,É,æ,è[]AfŒfR[[fh,l[]®—[],ð,æ,èŒø—¦"I,É[]s,¤,± ,Æ,ª,Å,«,Ü,·[]B[]Ú[]×,Í[]u<u>f]]fefSfŠ,Ì[]ì[]¬</u>[]v,ðŽQ[]Æ,µ,Ä,,¾,³,¢[]B

fJfefSfŠ,Í□AŠî-{"I,É,ÍfL□[f□□[fh,ðŠg'£,μ,½,à,Ì,Å,·,ªftf@fCf‹,Ì□®—□,ÉfL□[f□□[fh,¾,⁻,ðŽg p,·,éf□fffBfAŠÇ—□fVfXfef€,Æ,Í^Ù,È,è□A^ȉº,Ì,æ,¤,È—~"\_,ª, ,è,Ü,·□B

 $\Box E fL\Box[f\Box\Box[fh,\mathcal{A}^{+-}-I,\dot{E}\BoxAftf@fCf<,\delta\Boxa-\frac{3}{4},\cdot,\dot{e}CA^{-}-I-\frac{1}{4},\delta fJfefSfŠ,\dot{E}\bullet t,^{-},\dot{e},\pm,\mathcal{A},a^{a},\dot{A},\ll,\ddot{U},\cdot\Box B$ 

- [E fhf‰fbfO[]•fhf[]fbfv,É,æ,éŠÈ'P,È'€[]ì,Å[]A•i[]",ÌfŒfR[][fh,É[]A^ê,Â,Ü,½,Í•i[]",Ìf]fefSfŠ-¼,ð"o<sup>^</sup>,,,é,±,Æ,ª,Å,«,Ü,·]]B
- □E fJfefSfŠ,Í□AfŠfXfg,©,ç'¼□ÚŒŸ□õ,ª,Å,«,Ü,·□B
- □E fL□[f□□[fh,Æ^Ù,È,è□AfJfefSfŠ,ĺŠK'w□\'¢,É,·,é,±,Æ,ª,Å,«,Ü,·□B,±,ê,É,æ,è□A— I□X,ÈfJfefSfŠ,ð'□□<sup>~</sup>,æ,□®—□,·,é,±,Æ,ª,Å,«□A,Ü,½fJfefSfŠŠÔ,ÌŠÖ<sup>~</sup>A,ð<sup>^</sup>ê——,ÅŒ©,é,± ,Æ,ª,Å,«,Ü,·□B

ʻl'ð,μ,½fJfefSfŠ,ª"o~^,³,ê,Ä,¢

,éfŒfR□[[fh,ðŒŸ□õ,·,é,É,Í□Af]JefSfŠ,ðf\_fuf<fNfŠfbfN,·,é,©□AfJfefSfŠ,ð'I'ð,µ,ÄENTERfL□[,ð ‰Ÿ,µ,Ü,·□B

ŠefJfefSfŠ,ÌftfHf‹f\_,Ì□¶,É, ,é+,Ü,½,Í-,Ìf{f^f",ðfNfŠfbfN,µ,Ä□AfJfefSfŠ,ÌŠK'w•\ަ,Ì—L-³,ð□Ø,è'Ö,¦,é,±,Æ,ª,Å,«,Ü,·□BfJfefSfŠ,ðŠK'w•\ަ,·,é,É,Í□AfJfefSfŠ-¼,Ì□¶,É, , é+f{f^f",ðfNfŠfbfN,µ,Ü,·□BfJfefSfŠ,ªŠK'w•\ަ,³,ê,é,Æ□A□}12,Ì,æ,¤,É□A+f{f^f",ªf{f^f",É,È,è,Ü,·□B

fJ□[f\f‹,ðfJfefSfŠ,Ì□ã,É^Ú"®,μ,ĉEf}fEfXf{f^f",ðfNfŠfbfN,·,é,Æ□A<u>[f]fefSfŠ]f|fbfvfAfbfvf□fjf...</u> □[,ª•\ަ,³,ê,Ü,·□B[f]fefSfŠ]f|fbfvfAfbfvf□fjf...□[,©,ç□A[f]fefSfŠ]f□fjf...□[,Ì,æ,Žg p,·,éflfvfVf‡f",ð,·,Î,â,—~—p,·,é,±,Æ,ª,Å,«,Ü,·□B

{button ,AL(`basics',0,`',`')}  $\underline{SO^{A} \square \in -U}$ 

# ¥°]={'€]) •Ò]Wf]fjf...][fRf}f"fh,ÌŽg—p

•Ò□Wf□fjf...□[fRf}f"fh,ðŽg—p,μ,Ä□A"Á'è,Ì'€□ì,ð'l'ð□A'l'ð  $\label{eq:starter} \ensuremath{ \baselineskip} \ensurema$ fJfefSfŠ-¼[]AfŒfR[][fh-¼[]A,¨,æ,ÑŒŸ[]õ'l,Ì•¶Žš flfbfg —ñ,ðflfbfq,Å,«,Ü,·∏B fJfefSfŠ-¼[]AfŒfR[][fh-¼[]A,¨,æ,ÑŒŸ[]õ'l,Ì•¶Žš fRfs[][ fJfefSfŠ-¼[]AfŒfR[[fh-¼[]A,¨,æ,ÑŒŸ[]õ'l,Ì•¶Žš fy[[fXfg —ñ,ðfy□[fXfg,Å,«,Ü,·□B ∐í∏œ fJfefSfŠ,ÆfŒfR□[fh,ð□í□œ,Å,«,Ü,·□B Žæ,è∏Á, fŒfR[[fh-ً¼fťfB□[f<fh,ÆŒŸ□õ'lftfB□[f<fh,Ì'€□ì,ĺŽæ,è□Á,¹, μ Ü, , ITA, ×, Ì'¼, Ì'€∏Ì, ÍŽæ, è∏Ă, I, Ü, I, ñ∏B ,·,×,Ä,ðʻl [,·,×,Ä,ðʻl'ð],ÍʃJfefSfŠ,ÆfŒfR□[fh,ÉŽg— 'ð p.Å.«.Ü→□R ʻlʻð ['l'ð‰ð]]œ],ĺfJfefSfŠ,ÆfŒfR[][fh,ÉŽg p,Å,«,Ü,⊡B ‰ð∏œ

### <sup>∭</sup>Šî-{*'*€]ì ]î∙ñ,Ì^ó]ü

$$\begin{split} & \text{Cumulus,} \acute{E}, \acute{I} \square A, \overset{3}, \dddot{U}, \acute{U}, \grave{E} \square^{\bullet} \tilde{n}, \eth^{\circ} \acute{O} \square^{\circ}, \cdot, \acute{e} \cdot @^{"} \backslash, \overset{a}{_{-}}, \grave{e}, \dddot{U}, \cdot \square B^{\circ} \square^{\circ} \Pi^{\circ} Ff, \acute{I} \square^{\circ} \Pi^{\circ} \Pi$$

"à—e

- □E <u>fŒfR□[fh□î•ñ,Ì^ó□ü</u>
- □E <u>fJfefSfŠ</u>□î•ñ,Ì^ó<u>□</u>ü
- []E <u>f[]fO[]î•ñ,ð^ó[]ü</u>
- □E <u>^ó□ü'O,É□î•ñ,ðfvfŒfrf...□[</u>

{button ,AL(`basics',0,`',`')} <u>ŠÖ<sup>~</sup>A□€–Ú</u>

## <sup>W</sup>Šî-{'€]ì Wြî•ñ,Ì^ó⊟ü fŒfR□[fh⊡î•ñ,Ì^ó⊟ü

 $\underbrace{fTf {\fif} f_{\c}}{fTf {\fif} f_{\c}} Af {\c} fR [\c] fh, \c) [\c) \times [\c] A[f {\c} fR [\c] fhf {\c} f_{\c} fhf {\c} fhf {\c} fhf {\c} fhf {\c} hf$ 

### fŒfR[[fh[]î•ñ,ð^ó]ü,·,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

- ^ó[□u,·,éfŒfR[[fh,ð'l'ð,µ,Ü,·]B
  •¡□",ÌfŒfR[[fh,ð'l'ð,·,é,É,ÍCTRLfL][,ð]A,Ü,½~A'±,µ,½fŒfR[[fh,ð'l'ð,·,é,É,Í]ASHIFTfL][,ð ‰Ÿ,µ,È,ª,ç]A'l'ð,·,é•"•ª,Ì]Å[‰,Æ]ÅŒã,ÌfŒfR[[fh,ðfNfŠfbfN,µ,Ü,·]B
- $2. \quad [ftf@fCf<]f[fjf...[[, \odot, c[f \times fR[[fh, \delta^{o}] "], \delta' l' \delta, \mu, "], \ B$
- 3.  $fTfuf fif... [[, ©, c^ȉ^{o}, i, c, ], e, ©, \delta'I' \delta, \mu, Ü, G B$ 
  - $\label{eq:constraint} \begin{array}{ll} & \label{eq:constraint} & \label{constraint} & \label{eq:constraint} & \$
  - $\label{eq:constraint} \begin{array}{l} \label{eq:constraint} \blacksquare E ~ [fTf \end{tighted} ff \end{tighted$
  - $\label{eq:entropy} \begin{array}{c} \label{eq:entropy} \mathbb{E} \quad [fTf \notin flfCf <` a...], \\ \begin{aligned} \$

  - $\label{eq:constraint} \begin{array}{l} \label{eq:constraint} \blacksquare E ~ [f \pounds f R \square [f h \square i \bullet \tilde{n} \dots], \\ i \square A [f \pounds f R \square [f h f v f \square f p f e f B] f E f B f ``f h f E, \\ i``a e, \\ \delta^{\circ} \delta \square \ddot{u}, \\ \mu, \\ \ddot{U}, \\ \Box B \end{array}$
- $4. \quad [^{o}_{J}]_{f} f_{f} {button ,AL(`basics',0,`',`')}  $\underline{\check{SO}^{-}A_{\Box} \in -\acute{U}}$

# ¥§î-{'€]ì المُ]î•ñ,Ì^ó]ت fJfefSfŠ]î•ñ,Ì^ó]ü

'l'ð,μ,½<u>f]fefSfŠ</u>,É,Â,¢,Ä,Ì□î•ñ,ð^ó□ü,·,é,± ,Æ,ª,Å,«,Ü,·□B,Ü,½Cumulus,©,çfJf^f□fO,³,ê,½flfŠfWfif<,Ì<u>fvfŒfrf...□[</u>,ð^ó□ü,μ,½,è□A•Ê,Ìfvf□fOf ‰f€,ðŽg,Á,ÄflfŠfWfif<,ð^ó□ü,·,é,±,Æ,à,Å,«,Ü,·□B□Ú□×,Í□A□u<u>fvfŒfrf...</u> □[f<u>Cf□□[fW,Ì^ó□ü</u>□v,¨,æ,Ñ□u,<u>»,Ì'¼,Ìfvf□fOf‰f€,©,çflfŠfWfif<,ð^ó□ü</u>□v,ðŽQ□Æ,μ,Ä,,¾,³,¢□B

### fJfefSfŠ□î•ñ,ð^ó□ü,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

^ó□ü, ·, éfJfefSfŠ,ð'I'ð, µ, Ü, ·□B

- 2. [ftf@fCf<]f $\Box$ fjf... $\Box$ [,  $\odot$ , c[f]fefSfŠ,  $\delta^{o}$  $\Box$  $\Box$ ],  $\delta'$ 1' $\delta$ ,  $\mu$ ,  $\ddot{U}$ ,  $\Box$ B
- 3.  $[\circ \Box]_{fcfAf} fof{fbfNfX, A"K 0, E'1'\delta, \delta s, CK, \delta fNfSfbfN, \mu, U, B$

{button ,AL(`basics',0,`',`')}  $\underline{\check{SO}^{A} \square \underbrace{\in} - \acute{U}$
#### ÜŠî-{'€[]ì Ü[[î•ñ,Ì^ó[]ü f[]fO[]î•ñ,Ì^ó[]ü

$$\begin{split} & (E*)[\dot{Y},\dot{I}]f^{f}[fO,\dot{E},\dot{A},\dot{q},\ddot{A},\dot{l}]]^{\bullet}\tilde{n},\hat{a}[]Af[]fO[]^{\bullet}\tilde{n},\dot{l}]\underline{fvf}\underline{ftf}...[[,ð^{o}]\ddot{u},\dot{A},*,\ddot{U},\cdot]B[]\dot{U}]\times,\dot{I}[]u\underline{fvf}\underline{ftf}...[],\dot{d}^{o}]\ddot{u}]v,\dot{d}ZQ[\mathcal{E},\mu,\ddot{A},,\overset{3}{4},\overset{3}{4},]B \end{split}$$

#### fJf^f□fO□î•ñ,ð^ó□ü,∙,é,É,ĺ

- 1. <u>ŠÇ—∏ŽÒf,∏[fh</u>,ð•\ަ,μ,Ü,·<u></u>B
- 2.  $ftf@fCf < f \Box f j \dots \Box [, \& [fXfe \Box [f^fX, \& f \Box f O, \delta^{\circ} \circ \Box u], \delta f N f \check{S} f b f N, \mu, \ddot{U}, \cdot \Box B$
- $3. \quad []u^{o}[]u]vf_fCfAf[]fOf{fbfNfX, Å"K"-, È'I'ð, \delta[]s, \cap{lambda}[]s, \cap{lambda}[]A[OK], \delta fNfŠfbfN, \mbox{$\mu$}, \cap{lambda}], \cap{lambda}[]bfNfX, \mbox{$\mu$}]$

{button ,AL(`basics',0,`',`')}  $\underline{SO^{A} \square \in -U}$ 

₩Šî-{'€]ì ₩]î•ñ,Ì^ó]ü fvfŒfrf...][

[^ó[]üfvfŒfrf...[][],É,æ,Á,Ä[]A^ó[]ü,Ì'O,ÉfŒfCfAfEfg,ð•\ަ,Å,«,Ü,·[]B ^<mark>ó[]ü'O,ÉfŒfR[][fh[]î•ñ,ÌfvfŒfrf...[[,ð•\ަ,•,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B</mark>

- $1. \quad [ftf@fCf <]f[]fjf...[[, @, c[^o[]ufvf@frf...[]], \delta'l'\delta, \mu, Ü, \cdot]B$
- 2.  $fTfuf[fjf...[[, ©, c^ȉ^{o}, \dot{l}, c, ], \hat{e}, ©, \delta'I'\delta, \mu, \ddot{U}, \cdot]B$ 
  - $\label{eq:constraint} \begin{array}{l} \label{eq:constraint} \blacksquare \label{eq:constraint} \begin{bmatrix} fTf \end{tilter} ff \end{tilter}$
  - $\label{eq:constraint} \begin{array}{l} \square E \quad [fTf \notin flfCf < 't ...], \\ i \square Af \oplus fR \square [fh, ] fvf \oplus frf ... \square [, \\ \delta \underline{fTf \notin flfCf < f}, \square [fh 128 \square ~ 128, \\ ^{A} \bullet \ \\ \check{Z} \ |, \\ \mu, \ddot{U}, \cdot \end{array}$

  - $\label{eq:linear_state} \begin{array}{l} & \label{eq:linear_state} \\ & \label{eq:linear_state}$
- 3.  $fEfBf"fhfE,I\square \tilde{a} \bullet ", \bigcirc, c"K\square \emptyset, Ef{f^f", \delta'I'\delta, \mu, Ü, \square B$ 
  - []E [^ó[]ü],Í[]AŒ»[]Ý,Ì•\ަ,ð^ó[]ü,μ,Ü,·]B
  - $\label{eq:linear} \begin{array}{l} & \label{eq:linear} \mathbb{E} \quad [\check{Z}\ddot{Y}fy\_[fW], \acute{I}\_A\check{Z}\ddot{Y}, \grave{I}fy\_[fW, \acute{E}fXfNf\_\_[f<,\mu,\ddot{U},\cdot\_B] \end{array} \end{array}$

  - $\label{eq:entropy} \begin{array}{l} & \label{eq:entropy} \mathbb{E} \quad [\bullet \hat{A}, \P, \acute{e}], \acute{I} \end{tabular} Afvf \\ & \end{tabular} Efrf... \end{tabular} [f, \end{tabular} [f, \end{tabular} [f, \end{tabular} h, \end{tabular} h, \end{tabular} h, \end{tabular} H, \end{tabular} \end{tabular} \end{tabular}$

{button ,AL(`basics',0,`',`')}  $\underline{\check{SO}^{A} \square \underbrace{\in} - \acute{U}}$ 

### fŒfR□[fh,ÌŽg—p

 $f @ f R [[fhfvf][fpfefB, ] \bullet ] ] X$   $f [f \cap [0, @, cf @ f R ][fh, \delta] ] @ @ \\f @ f R [[fh, ] ] X ] V$  f t f @ f C f < f Š f t f @ f @ f @ f "f X, ] Š m "F  $[ ] \hat{n}, ] ] ', « ] o, \mu, ", æ, \tilde{N} " C, Y ] ] X / Y$   $f @ f R [[fh] f A f = ] [f \cap f X, ] Z g - p$  [ f @ f R [[fh] f | f b f v f A f b f v f ] f f ... ] [, ] Z g - p

### <sup>∭</sup>fŒfR□[fh,ÌŽg—p fŒfR□[fhfvf□fpfefB,Ì•Ï□X

<u>fIfŠfWfif<ftf@fCf<,ðfJf^f□fO</u>,É"o<sup>~</sup>^,∙,é,±

,Æ,É,æ,Á,Ä□AfŒfR□[fh,ÆŒÄ,Î,ê,éfJf^f□fOfGf"fgfŠ,ª□ì□¬,³,ê,Ü,·□BfŒfR□[fh,É,Í□AflfŠfWfif<,Ìftf@ fCf<-¼a□Aftf@fCf<,̕ۑ¶□ê□Š□Aftf@fCf<Œ`Ž®□A<u>‰ð'œ"x</u>,È,Ç□AflfŠfWfif<,ÉŠÖ,·,錟□õ‰Â"\ ,È□î•ñ,ª•Û'¶,³,ê,Ü,·□BCumulus,Å,Í□AfŒfR□[fh□î•ñ,Í[fŒfR□[fhfvf□fpfefB]f\_fCfAf□fOf{fbfNfX,É•\ ަ,³,ê,Ü,·□B[fŒfR□[fhfvf□fpfefB]f\_fCfAf□fOf{fbfNfX,É,Í3,Â,Ìf^fu□ifŒfR□[fh□Afm□[fg□AflfŠfWfif< □j,ª, ,è□A‰E'¤,É,ÍfTf€flfCf<,ª•\ަ,³,ê,Ü,·□B

flfŠfWfif<,ÌfJf^f[]fOŽž,É[]A<u>[fŒfR[][fhfvf[]fpfefB]f\_fCfAf[]fOf{fbfNfX,ðŽ©"®"l,É•\ަ,³,¹,é</u>,± ,Æ,ª,Å,«,Ü,·[]B

- fŒfR□[fh,ð'l'ð,μ,Ü,·□B
- $2. [f \textcircled{G} f \\{G} f \textcircled{G} f \textcircled{G} f \\{G} f \textcircled{G} f \\{G} f \textcircled{G} f \\{G} f^fu,ð□Ø,è'Ö,¦,é,É,Í□Af^fu,Ìf^fCfgf<,ðfNfŠfbfN,µ,Ü,·□B</li>

<u>fŒfR∏[fh</u>

<u>fm[[fg</u>

<u>flfŠfWfif<</u>

- 4.  $[\dot{Y}'\dot{e}, \delta]s, \ A [``K-p], \delta fNf SfbfN, \mu, \ddot{U}, B, \ddot{U}, \frac{1}{2} f\underline{G} fR [fh-\frac{1}{4}, \dot{l} \bullet \dot{O} W, \overset{a}{2}, \dot{A}, \ll, \ddot{U}, B$
- f\_fCfAf□fOf{fbfNfX,ð•Â,¶,,,É'¼,ÌfŒfR□[fh,ð•\ަ,,é,É,Í□AfTf€flfCf<,̉⁰,Ìî^óf{f^f",ðfNfŠfbfN,µ,Ü,·□B
- $6. \quad [] \acute{Y} \grave{e}, \eth L \textcircled{e} \emptyset, \acute{E}, \mu, \" A f E f B f ``f h f E, \eth \bullet \^{A}, \P, \acute{e}, \acute{E}, \acute{I} \Box A [OK], \eth f N f \check{S} f b f N, \mu, \dddot U, \Box B$

[fvf□fpfefB]f\_fCfAf□fOf{fbfNfX,ÌfTf€flfCf<,©,çf|fbfvfAfbfvf□fjf...□[,ð•\ ަ,µ,Ä□AfTf€flfCf<,ðfŒfR□[fhŠÔ,ÅfRfs□[,·,é,±,Æ,ª,Å,«,Ü,·□B

#### fTf€flfCf‹,ðfRfs□[,∙,é,É,Í

1.]@fTf€flfCf<,ÌfRfs][,ð]s,¤fŒfR][fh,ð'l'ð,μ,Ü,·]B

 $2. @ [fvf ] fpf ef B] f_f Cf Af ] f Of { fbf Nf X, \delta • \Z', \mu, Ü, · ] B}$ 

3.]@fTf€flfCf<,Ì]ã,Åf}fEfX,ð‰EfNfŠfbfN,μ,Ü,·]B

4.□@f|fbfvfAfbfvf□fjf...□[,©,ç[fTf€flfCf<,ðfRfs□[],ð'l'ð,μ,Ü,·□B

5.]@fTf€flfCf<,Ìfy[[fXfg]æ,ÌfŒfR[[fh,ð'l'ð,μ,Ü,·]B

 $6. @[fvf]fpfefB]f_fCfAf]fOf{fbfNfX, \delta • \Ž, \mu, Ü, B$ 

7.]@fTf€flfCf<,Ì[]ã,'nEfNfŠfbfN,μ,Ü,·[]B

8.□@f|fbfvfAfbfvf□fjf...□[,©,ç[fTf€fl□[f<,ðfy□[fXfg],ð'l'ð,μ,Ü,·□B

{button ,AL(`records',0,`',`')} <u>ŠÖ~A $\Box \in -\acute{U}$ </u>

#### <sup>₩</sup>fŒfR□[fh,ÌŽg—p <sup>₩</sup>fŒfR□[fhfvf□fpfefB,Ì•Ï□X fŒfR□[fh-¼,Ì•Ò□W

ftf@fCf<,ðfJf^f[]fO,·,é,Æ[]AflfŠfWfif<,Ìftf@fCf<-¼,ªfŒfR[][fh-¼,Æ,µ,ÄŽ©"®"I,É"o~^,³,ê,Ü,·[]B,½,¾,µ[]AfŒfR[][fh-¼,Í[]Aftf@fCf<,Ì"à—e,ª,æ,è,í,©,è,â,·,¢-¼'O,É•Ï[]X,·,é[]A, ,é,¢,Í"ÆŽ©,Ì-¼'O•t,¯,Ì<K'¥,É[]],Á,Ä•t,¯,é,±,Æ,ª,Å,«,Ü,·[]BfŒfR[][fh-¼,Ì•Ï[]X,Í[]Aftf@fCf<-¼,É^Ó-¡,ª,È,¢[]A, ,é,¢,ÍflfŠfWfif<ftf@fCf<,ª"Ç,Ý,Æ,è[]ê pf[]fffBfA,ɕۑ¶,³,ê,Ä•Ï[]X,ª,Å,«,È,¢[]ê[]‡,É"Á,ɕ֗~,Å,·[]B

[]Å'å,Å31•¶Žš[]i‰pŒê,Å63•¶Žš[]j,ÌfŒfR[][fh-¼,ðŽg—p,·,é,±,Æ,ª,Å,«,Ü,·[]B-¼'O,Í[]AŒŸ[]õ,Ü,½,Íf\[[fg,ÌŠî[]€,É,·,é[]î•ñ(fWf‡fu"Ô[]†,âftf@fCf<,̕ۑ¶[]ê[]Š,È,Ç),È,Ç,ð[]I,¦,Ä"ü— Í,·,é,Æ[]AŒø‰Ê"I,Å,·[]B

fŒfR[[fh-¼,ð•Ò[]W,·,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

1. [f@fR[[fh]f]f]jf...[[, $\bigcirc$ ,c[fvf][fpfefB],ð'l'ð, $\mu$ ,Ü,·]B

[fŒfR□[fhfvf□fpfefB]fEfBf"fhfE,ª•\ަ,³,ê,Ü,·□B

- 2. [fŒfR□[fh]f^fu,ðfNfŠfbfN,μ,Ü,·□B
- 3. −¼'O,ÌftfB□[f<fh,ð"½"],³,¹□A□V,μ,¢−¼'O,ð"ü−ĺ,μ,Ü,·□B

4. ["K—p],ðfNfŠfbfN,μ,Ü,·□B

{button ,AL(`records',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

### <sup>∭</sup>fŒfR□[fh,ÌŽg—p <sup>∭</sup>fŒfR□[fhfvf□fpfefB,Ì•Ï□X fŒfR□[fhf^fu,ÌŽg—p

 $[f \textcircled{C} f R [] [f h] f^f u, \acute{E}, \acute{I} ] A \underbrace{f t f @ f C f_{,}} \acute{E} \breve{S} \ddot{O}, \cdot, \acute{e}^{\hat{e}} " \acute{E} ] \hat{\bullet} \tilde{n}, \overset{a}{\bullet} \setminus \check{Z} \\ ,^{3}, \acute{e}, \ddot{U}, \cdot ] B$ 

flfvfVf‡f"/ ftfB□[f <fh< th=""><th>—p"r</th></fh<>	—p"r
□C□³∙s‰Â	,±,ÌflfvfVf‡f",Í□A□î•ñ"à— e,Ì•ï□X,ð<ÖŽ~,μ,Ü,·□B
∏í∏œ∙s‰Â	,± ,ÌflfvfVf‡f",ĺ□Af†□[fU,É,æ,éfŒfR□[fh,Ì□í□œ,ð <ÖŽ~,µ,Ü,·□B
-1⁄4'O	fŒfR[[fh-¼,ª•\ ަ,³,ê,Ü,·]BffftfHf <fg,å,í]aftf@fcf<- ¼,ªfŒfR][fh- ¼,Æ,µ,Ä"o~^,³,ê,Ü,·]B,½,¾,µ]A,±,Ì- ¼'O,Í<u>•]]X,·,é,±</u> ,<u>Æ,ª,Å,«,Ü,·</u>]B]Ú]×,Í]A[]ufŒfR][fh- ¼,Ì•Ò]W]v,ðŽQ]Æ,µ,Ä,,¾,³,¢]B</fg,å,í]aftf@fcf<- 
fJf^f⊡fO	ƒͿƒ^ƒ□ƒΟ,μ,ăŒƒR□[ƒh,ð□ì□¬,μ,½"ú∙t,ª∙\ ަ,³,ê,Ü,·□B
□C□³"ú	'l'ð,µ,½fŒfR□[fh,ª□ÅŒã,É□C□³,³,ê,½"ú•t,ª •\ަ,³,ê,Ü,·□B
ft⊡[fU	ffftfHf‹fg,Å,Í□A,± ,ÌftfB□[f‹fh,É,Í,»,Ìftf@fCf‹,ðfJf^f□fO,μ,½ft□[f U,Ì–¼'O,ª•\ ަ,³,ê,Ü,·□BftfB□[f‹fh,ð•Ò□W,·,é,É,Í□AffftfHf ‹fg,Ì–¼'O,𔽓],³,¹,Ä□Ä"ü—Í,μ□A["K—p] ,ðfNfŠfbfN,μ,Ü,·□B
	,±,ÌfGf"fgfŠ,Í□A[fJf^f□fOflfvfVf‡f"] ,Å <u>Ž©"®"I,É□Ý'è,·,é</u> ,± ,Æ,ª,Å,«,Ü,·□B□Ú□×,Í□A□u[^ê"Ê]f^fu□v,ðŽ Q□Æ,µ,Ä,,¾,³,¢□B
fXfe□[f^fX	ŠefŒfR[[fh,É,Í[]A[fXfe[][f^fX]fŠfXfg,©,ç'l'ð ,µ,½ <u>fXfe[][f^fX</u> ,ð1,Â,¾,¯"o~^,·,é,± ,Æ,ª,Å,«,Ü,·[]B'¼,Ì <u>fXfe[][f^fX</u> ,ð"o~^,·,é,É,Í[] A[fXfe[][f^fX]fŠfXfg,©,ç,»,ÌfXfe[][f^fX,ð'l'ð, µ[]A["K—p],ðfNfŠfbfN,µ,Ü,·[]B
	fXfe□[f^fX,̒ljÁ□E□í□œ∙û– @,Ì□Ú□×,Í□A□ufŒfR□[fhfXfe□[f^fX,ÌŽg— p□v,ðŽQ□Æ,µ,Ä,,¾,³,¢□B
fJfefSfŠ	[fJfefSfŠ]fŠfXfg,É,ĺ[[A,»,ÌfŒfR[][fh,É"o˜^,³,ê ,Ä,¢,é,·,×,Ä,Ì <u>f]fefSfŠ</u> ,ª•\ަ,³,ê,Ü,·[]B
{button ,AL(`records',0,`',`')}	<u>ŠÖ~A⊡€–Ú</u>

#### <sup>∭</sup>fŒfR□[fh,ÌŽg—p <sup>∭</sup>fŒfR□[fhfvf□fpfefB,Ì•Ï□X [fm□[fg]f^fu,ÌŽg—p

[fm□[fg]f^fu,ðŽg—p,μ,Ä□AfŒfR□[fh,ÉŠÖ,·,錟□õ‰Â"\,È□î•ñ,ð'ljÁ"ü—ĺ,·,é,± ,Æ,ª,Å,«,Ü,·□Bfm□[fg,Í□AŒŸ□õ□ðŒ□,Æ,μ,ÄŽg—p,·,é,±,Æ,ª,Å,«,Ü,·□B

ŠefŒfR□[fh,Ìfm□[fg,É,Í□A□Å'å32 KB□i"ú-{Œê,Å-ñ16,000•¶Žš□j,ÌfefLfXfg,ð"ü—ĺ,·,é,± ,Æ,ª,Å,«,Ü,·□B^ê"Ê"I,Èfm□[fg,Ì—á,ð^ȉº,ÉŽ¦,µ,Ü,·□B

 $\label{eq:constraint} \begin{array}{c} \label{eq:constraint} \mathbb{E} \quad \label{eq:constraint} 0 \label{eq:constraint} \mathbb{E} \quad \label{eq:constraint} \mathbb{E} \quad \label{eq:constraint} \mathbb{E} \quad \mathbb$ 

 $\label{eq:linear} \begin{array}{c} \label{eq:linear} \blacksquare E & \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{array} \end{array} \begin{array}{c} \end{ar$ 

[]E ftf@fCf<,ð^ó[]ü[]AŽg—p[]A•Ò[]W,·,éŽè[]‡</pre>

□E JPEG,Ü,½,ÍJFIFftf@fCf<,ÌIPTCfwfbf\_□î•ñ(□'□Û□V•'Ê□M^Ï^õ‰ï,É,æ,è<K'è,³,ê□Afjf... □[fX"z□MfT□[frfX,ÅŽg—p,³,ê,Ä,¢,éŒ`Ž®)

fm[[fg[]î•ñ,ð"ü—ĺ,·,é,Æ,«[]Afm[[fg[]î•ñ,ª'å,«,¢,Æ'S'Ì,ÌfpftfH[][f}f"fX,ª'x,,È,è,Ü,·[]B^È ‰º,É'[]^Ó,μ,Ä,,¾,³,¢[]B

[]E fm[[fg,ð,Å,«,é,¾,⁻ŠÈŒ‰,É,∙,é

[]E ′·,¢Œ¾,¢,Ü,í,μ,ð"ð,⁻,é

<u>f]f^f⊡fOŽž,Éfm□[fg,ðŽæ,è□ž,Þ</u>,±,Æ,ª,Å,«,Ü,·□B

{button ,AL(`records',0,`',`')} <u>ŠÖ~A $\Box$ €-Ú</u>

#### ŴfŒfR□[fh,ÌŽg—p ŴfŒfR□[fhfvf□fpfefB,Ì•Ï□X [flfŠfWfif<]f^fu,ÌŽg—p

flfvfVf‡f"/ ftfB□[f <fh< th=""><th>—p"r</th></fh<>	—p"r
MacOS/ Windows	Macintosh,ÆWindows,Ì— ¼∙û,ÌŒ`Ž®,Å∏AfJf^f∏fO,µ,½ftf@fCf‹,̕ۑ ¶∏ê∏Š,ª•\ަ,³,ê,Ü,∙∏B
Dì⊡¬f∨f⊡fO f‰f€	ſJf^f⊡fO,μ,½ſtf@fCf<,Ì□ì□¬fAfvfŠfP□[fVf‡f" -¼,ª∙\ަ,³,ê,Ü,∵□B
ftf@fCf‹Œ` Ž®	fJf^f⊡fO,μ,½ftf@fCf‹,Ìftf@fCf‹Œ`Ž®,ª∙\ ަ,³,ê,Ü,·∏B
ftf@fCf√fTf CfY	fJf^f⊡fO,μ,½ftf@fCf<,Ì—e—Ê,ª∙\ ަ,³,ê,Ü,∙∏B
[]ì[]¬"ú	ftf@fCf<,ª[]ì[]¬,³,ê,½"ú•t,ª•\ަ,³,ê,Ü,·[]B
<b>□</b> C <b>□</b> ³"ú	ftf@fCf<,ª□ÅŒã,É□C□³,³,ê,½"ú•t,ª•\ ަ,³,ê,Ü,·□B
‰æ'œf,∏[ fh	ftf@fCf‹,̉摜f,□[fh(f ‰fCf"fA□[fg□AfOfŒ□[fXfP□[f‹□AfJf‰□[) ,ª•\ަ,³,ê,Ü,·□B
‰ð'œ"x	ftf@fCf‹,Ì <u>‰ð'œ"x</u> (dpi),ª∙\ަ,³,ê,Ü,· <u>□</u> B
f^fe	ftf@fCf<,Ì[]c,Ì[]¡-@,ª•\ަ,³,ê,Ü,·[]B
f^fR	ftf@fCf<,̉¡,Ì□¡−@,ª∙\ަ,³,ê,Ü,·□B
<u>Π</u> Ú,μ,	,± ,Ìf{f^f",ðfNfŠfbfN,∙,é,Æ <u>□AfJf^f□fO</u> Žž,É"Ç, Ý <u>□</u> ž,Ü,ê,½□A,»,Ìftf@fCf‹Œ`Ž®,É"Á— L,Ì□î•ñ(frffflfNfŠfbfv,Ì□Ä□¶ŽžŠÔ,È,Ç),ª•\ ަ,³,ê,Ü,·□B
{button ,AL(`records',0,`',`')}	<u>ŠÖ~A⊡€–Ú</u>

[flfŠfWfif<]f^fu,É,Í□AfJf^f□fOŽž,ÉŽæ"¾,³,ê,½□Aftf@fCf<,ÉŠÖ,·,é□î•ñ,ª•\ަ,³,ê,Ü,·□B

#### <mark>Ѿ</mark>fŒfR□[fh,ÌŽg—p fJf^f□fO,©,çfŒfR□[fh,ð□í□œ,∙,é

 $f \mathbf{C} f \mathbf{R}_{[}[fh,\delta_{]}(]\infty,\cdot,\acute{e},\mathcal{A},\ast_{]}A,\ast,\dot{\mathbf{f}}_{]}\underline{f}_{\underline{f}}_{\underline{f}}\underline{f}_{$ 

1. <u>f@fR[[fhfEfBf"fhfE</u>,Å]A](] $\infty$ ,·,éf@fR][fh,ð'l'ð,µ,Ü,·]B

2. [f@fR[][fh]f[]fjf...[[,Ü,½,Í[<u>f@fR[][fhf][fbfvfAfbfv</u>] f[]fjf...[[,©,ç[f@fR[][fh,ð[]í[@],ð'l'ð,·,é,©[]ADELETEfL[],ð‰Ÿ,µ,Ü,·]]B

[fŒfR[][fh,ð[]í[]œ]f\_fCfAf[]fOf{fbfNfX,ª•\ަ,³,ê,Ü,·[]B

 $[flf \check{S} fW fif \langle ft f @ fCf \langle , a \square í \square œ, \cdot , é ], \check{\sigma} ' l' \check{\sigma}, \cdot , \acute{e}, \mathcal{E} \square A' l' \check{\sigma}, \mu, \frac{1}{2} f \mathfrak{E} f R \square [fh, \mathcal{E} flf \check{S} fW fif \langle ft f @ fCf \langle , \dot{l} - \frac{1}{4} \bullet \hat{u}, ^{a} \square \hat{\Pi} \square c, ^{3}, \hat{e}, \acute{e}, \dot{l}, A' \square \hat{O}, ^{a} \bullet K - v, A, \cdot \square B$ 

3. 'l'ð, $\mu$ ,½f@fR[[fh,ð]í]@,·,é,É,Í]A[[í]@],ðfNfŠfbfN, $\mu$ ,Ü,·]BŽæ,è]Á,·,É,Í]A[fLfff"fZf<],ðfNfŠfbfN, $\mu$ ,Ü,·]B

'[]: ,±,ÌfRf}f"fh,Í[]Af[]fbfN,³,ê,½fJf^f[]fO,Å,ÍŽg—p,Å,«,Ü,¹,ñ[]B

{button ,AL(`records',0,`',`')} <u>ŠÖ<sup>~</sup>A $\square \in -U$ </u>

### <sup>∭</sup>fŒfR□[fh,ÌŽg—p fŒfR□[fh,Ì□X□V

fJf^f□fOŒã,ÉfIfŠfWfif<ftf@fCf<,ð□C□³,µ,½□ê□‡,ĺ□AŠY"-,·,éfŒfR□[fh,ð□X□V,·,é,æ,¤ ,¨Š©,ß,µ,Ü,·□BfŒfR□[fh,ð□X□V,·,é,Æ□A<u>fTf€fIfCf<,</u>ª□Ä"x□ì□¬,³,ê□A[<u>fŒfR□[fhfvf□fpfefB]</u>fEfBf"fhf E,É•\

Žĺ,³,ἑ,éflfŠfWfif<ftf@fCf<,ÌŽ□,Â□î•ñ,ª,·,×,Ä□X□V,³,ê,Ü,·□Bf†□[fU'è<`,ÌfŒfR□[fh□î•ñ(fŒfR□[fh– ¼□Afm□[fg,È,Ç),Í□A□X□V,³,ê,Ü,¹,ñ□B

fŒfR[[fh,ð[]X[]V,·,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

1.  $\underline{f \oplus f R} [f h f E f B f" f h f E, A A V, \cdot, e f \oplus f R [f h, \delta' I' \delta, \mu, V, \cdot] B$ 

3.  $fTfuf[fjf...[[, ©, c]A[[X]V], Ü, ½, I[<][X]V], \delta'I'\delta, \mu, Ü, B$ 

$$\label{eq:linear_state} \begin{split} & [\begin{subarray}{l} \end{subarray}] \mathbb{E}[\begin{subarray}{l} X \end{subarray}] V_{, 0}^{*}, & (A_{, 0}^{*}) \end{subarray} \\ & (A_{, 0$$

[<<u>□</u>§□X□V],ð'l'ð,·,é,Æ□A□V,μ,¢fTf€flfCf<,ª□ì□¬,³,ê□Aftf@fCf<,Ì•Ï□X,Ì—L-³,ÉŠÖŒW,È,-□AfŒfR□[fh□î•ñ,ª□X□V,³,ê,Ü,·□B[□X□V]

,ĺ□Ăftƒ@fČf<,ð•Ï□X,µ,½□ê□‡,â□A^ê"Ê"I,È<u>f]f^f□fOfIfvfVf‡f"</u>,ð□X□V,µ,½□ê□‡,ɕ֗~,Å,·□B

'[]: ,±,ÌfRf}f"fh,Í[]Af[]fbfN,³,ê,½fJf^f[]fO,Å,ÍŽg—p,Å,«,Ü,¹,ñ[]B

{button ,AL(`records',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€-Ú</u>

#### <sup>∭</sup>fŒfR**□[fh,ÌŽg—p** ftf@fCf<fŠftf@fŒf"fX,ÌŠm"F

fJf^f□fO,μ,½Œã,ÉfIfŠfWfif<ftf@fCf<,ð^Ú"®,μ,½□ê□‡,ĺ□ACumulus,ªftf@fCf<,Ì□V,μ,¢^Ú"®□æ,ð"Á' è,·,é,½,ß,Éftf@fCf<fŠftf@fŒf"fX,ð•Ï□X,μ,Ü,·□Bftf@fCf<fŠftf@fŒf"fX,Í□A□Å□V,Ì,à,Ì,É,μ,Ä,¨,•K v,ª, ,è,Ü,·□B

 $\label{eq:cumulus} Cumulus, i[]Aftf@fCf<fŠftf@fŒf"fX,ð'^2,×,é,±,Æ,Å[]Aftf@fCf<,^fGtR[][fh,ÌŽ[],Á,Ä,¢, ,é[]î•ñ,Æ"^,¶[]ê]]Š,É,,é,±$ 

,Æ,ðŠm"F,µ,Ü,·□Bftf@fCf<,ð"Á'è,Å,«,È,¢□ê□‡,Í□Af†□[fU,É□ê□Š,ðŽw'è,·,é,½,ß,Ìf\_fCfAf□fOf{fbfNf X,ª•\ަ,³,ê,Ü,·□B

 $ftf@fCf<, lfŠftf@f@ff'fX, \delta'^2, \times, \acute{e}, \acute{E}, l[A^ȉ^2, l\check{Z}e[], \acute{e}, U, \cdot B$ 

 $1. \ \underline{f \oplus f R [] [f h f E f B f "f h f E, Å ] A f \oplus f R [] [f h, \delta' l' \delta, \mu, Ü, \cdot ] B}$ 

2. [fŒfR[][fh]f[]fjf...[][,Ü,½,ĺ[<u>fŒfR[][fhf|fbfvfAfbfv</u>]f[]fjf...[][,©,ç[fŠftf@fŒf"fX,ðŠm"F] ,ð'l'ð,μ,Ü,·]]B

 $,\cdot,\times,\ddot{A},\dot{I}ftf@fCf\langle f\check{S}ftf@f{}ffX,^{a'2},\times,c,\hat{e}(\check{S}m''F,^{3},\hat{e}) \Box Af{}{}f{}FfC_{a} Df^{*}(F,^{3},\hat{e},\ddot{U},\cdot \Box B)$ 

flfŠfWfif<ftf@fCf<,ª"Á'è,Å,«,È,¢[]ê[]‡,Í[]A[[]ê[]Š,ðŽw'è,μ,Ä,,¾,³,¢]f\_fCfAf[]fOf{fbfNfX,ª•\ ަ,³,ê,Ü,·[]B,»,Ìftf@fCf<,Ì-¼'O,Í[]A[ftf@fCf<-¼]ftfB[][f<fh,É•\ަ,³,ê,Ü,·[]B 3.

, flfŠfWfif‹ftf@fCf‹,Ö,ÌfŠf"fN,ð□Ä□Ý'è,·,é,É,Í□A[ftf@fCf‹,Ì□ê□Š]f{fbfNfX,Åftf@fCf‹,ð"Á'è,μ□A[ŠJ,] ,ðfNfŠfbfN,μ,Ü,·□B

4. Šm"F,·,é•K—v,Ì,È,¢ftf@fCf<,Í $\Box$ A[fXfLfbfv],ðfNfŠfbfN,µ,Ü,· $\Box$ B

'[]: ,±,ÌfRf}f"fh,Í[]Af[]fbfN,³,ê,½fJf^f[]fO,Å,ÍŽg—p,Å,«,Ü,¹,ñ[]B

{button ,AL(`records',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

#### <mark>Ѿ</mark>fŒfR□[fh,ÌŽg—p □î∙ñ,Ì□',«□o,μ,¨,æ,Ñ"Ç,Ý□ž,Ý

f@fR[[fh[Af]fefSfŠ]A,Ü,½,ĺ@Ÿ]ôfNfGfŠ[]î•ñ,ðf^fu<æ]Ø,è,ÌfefLfXfgftf@fCf<,É<u>l',«]o,µ</u>]AŽŸ,É,», ê,ç,ð'¼,Ìf]fefSfŠ,Ü,½,ÍfAfvfŠfP][fVf‡f",É<u>"Ç,Ý]ž,Þ</u>,±,Æ,ª,Å,«,Ü,·]B,±,Ì<@"\ ,É,æ,Á,Ä]A'½]]",Ìf@fR][fh,ðf]f^f]fOŠÔ,Å^Ú"®,µ,½,è]Af@fR][fhff][f^,ð'¼,ÌfAfvfŠfP][fVf‡f",É @<]‡,·,é,±,Æ,ª,Å,«,Ü,·]B

Cumulus,ªŽÀ[]Û,É[]ì[]¬,·,éftf@fCf‹Œ`Ž®,Í[]A[]',«[]o,·[]î•ñ,ÌŽí—Þ,É,æ,è^Ù,È,è,Ü,·[]B

□',«□o,μ/"Ç,Ý□ž,Ý, ð□s,¤□î∙ñ	Cumulus,Ìftf@fCf‹Œ`Ž®/ Šg'£Žq	
fJfefSfŠ∏î∙ñ	<u>f]fefSfŠftf@fCf&lt;</u> (*.cce)	
fŒfR[[[fh[]î∙ñ	f <u>@fR[][fhftf@fCf&lt;</u> (*.cre)	
ŒŸ∏õfNfGfŠ∏î∙ñ	<u>ŒŸ∏õfNfGfŠftf@fCf&lt;</u> (*.cqe)	

fJfefSfŠ,ÆfŒfR□[fh,Ì—

<sup>J</sup>/<sub>4</sub>•û,l⊡î•ñ,ð⊡',«□o,·⊡Û,l□A,Ü, <u>flfefSfŠ</u>,Ì□',«□o,μ/"Ç,Ý□ž,Ý,ðŽÀ□s,μ,Ä,©,ç□A,»,ÌfJfefSfŠ,É"o<sup>~</sup>^,³,ê, ½<u>fŒfR□[fh</u>,Ì□',«□o,μ/"Ç,Ý□ž,Ý,ðŽÀ□s,μ,Ä,,¾,³,¢□B,±

,Ì□‡□<sup>~</sup>,Å□<sup>′</sup>,«□o,µ,¨,æ,Ñ"Ç,Y□ž,Ý,ðŽÀ□s,µ,Ě,¢,Æ□AfJfefSfŠ,ÆfŒfR□[fh,ÌŠÖŒW,ª–³Œø,É,È,è,Ü,·□B {button ,AL(`records',0,`',`')} <u>ŠÖ<sup>~</sup>A□€-Ú</u>

#### <mark>Ѿ</mark>fŒfR□[fh,ÌŽg—p Ѿ⊡î∙ñ,Ì□',«□o,μ,¨,æ,Ñ"Ç,Ý□ž,Ý □î∙ñ,Ì□',«□o,μ

fŒfR□[fh□AfJfefSfŠ□A,Ü,½,ĺŒŸ□õfNfGfŠ□î•ñ,ðf^fu‹æ□Ø,è,ÌfefLfXfgftf@fCf‹,É□',«□o,μ□AŽŸ,É,», ê,ç,ð'¼,ÌfJf^f□fO,Ü,½,ÍfAfvfŠfP□[fVf‡f",É<u>"Ç,Ý□ž,Þ</u>,±,Æ,ª,Å,«,Ü,·□B

fŒfR[[fh[]AfJfefSfŠ[]AŒŸ[]õfNfGfŠ,ÌŠe[]î•ñ,ð[]',«[]o,·,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

[□',«□o,µ□æ]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B

 $3. \ [ \bullet \hat{U}^{\prime} \P, \cdot, \acute{e} \square \hat{e} \square \check{S} ] ftfB \square [f < fh, \mathring{A} \square A \underline{f \oplus fR} \square [f h \underline{ftf} @ \underline{fCf} < , \eth \bullet \hat{U}^{\prime} \P, \cdot, \acute{e} \square \hat{e} \square \check{S}, \eth \check{Z} w' \grave{e}, \mu, \ddot{U}, \cdot \square B ]$ 

4. ffftfHf‹fg,Ìftf@fCf‹-¼,ð,»,Ì,Ü,ÜŽg—p,∙,é□ê□‡,Í□A[•Û'¶],ðfNfŠfbfN,μ,Ü,·□BŽg p,μ,È,¢□ê□‡,Í□A[ftf@fCf‹-¼]ftfB□[f‹fh,É□V,μ,¢-¼'O,ð"ü—Í,μ,Ä[•Û'¶],ðfNfŠfbfN,μ,Ü,·□B

 $\underline{\ \ \ } \underline{\ \ \ } \underline{\ \ } \underline{\ \ } \underline{\ \ \ } \underline{\ \ \ } \underline{\ \ \ } \underline{\ \ \ } \underline{\ \ \ \ \ } \underline{\ \ \ \ \ \ } \underline{\ \ \ \ \ \ \ \$ 

{button ,AL(`records',0,`',`')} <u>ŠÖ<sup>~</sup>A $\square \in -U$ </u>

#### <mark>Ѿ</mark>fŒfR□[fh,ÌŽg—p Ѿ⊡î∙ñ,Ì□',«□o,μ,¨,æ,Ñ"Ç,Ý□ž,Ý □î∙ñ,Ì"Ç,Ý□ž,Ý

,Ì□î∙ñ,ð["Ç,Ý□ž,Ý]fRf}f"fh,ðŽg,Á,Ä"Ç,Ý□ž,ñ,¾,è□AfŒfR□[fh,ÆfJfefSfŠ,ðfJf^f□fOŠÔ,Åfhf ‰fbfO&fhf□fbfv,µ,ÄfRfs□[,∙,é,±,Æ,ª,Å,«,Ü,∙□B

fŒfR[[[fh[]AfJfefSfŠ[]AŒŸ[]õfNfGfŠ,Ì,¢,\_,ê,©,ð"Ç,Ý[]ž,Þ,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

1. [ftf@fCf<]f $\Box$ fjf... $\Box$ [, $\odot$ , $\varsigma$ ["Ç, $\dot{Y}$  $\Box$ ž, $\dot{Y}$ ], $\delta$ 'l' $\delta$ , $\mu$ , $\ddot{U}$ , $\Box$ B

2. fTfuf[]fjf...[[,@,c"K]Ø,È"Ç,Ý]ž,ÝflfvfVf‡f",ð'l'ð,µ,Ü,·]B

 $[\check{S}J,]f_fCfAf[]fOf{fbfNfX,^{a}\bullet\backslash\check{Z}^{!},^{3},\hat{e},\ddot{U},\cdot]B$ 

 $3. [ftf@fCf<, \hat{l}] \hat{e}] \tilde{S}]f{fbfNfX, \hat{A}]A"C, \hat{Y}] \tilde{z}, \\ pftf@fCf<, \hat{o}`l`\hat{o}, \mu]A[\tilde{S}], ], \\ \hat{o}fNf\tilde{S}fbfN, \mu, \ddot{U}, \\ \vdots]B$ 

'[]: ,±,ÌfRf}f"fh,Í[]Af[]fbfN,³,ê,½fJf^f[]fO,Å,ÍŽg—p,Å,«,Ü,¹,ñ[]B

{button ,AL(`records',0,`',`')}  $\underline{\check{SO}^{A} \square \in -\acute{U}}$ 

### <sup>∭</sup>fŒfR□[fh,ÌŽg—p fŒfR□[fhfXfe□[f^fX,ÌŽg—p

ŠefŒfR∏[fh,Éf†∏[fU,Ì'è<`,μ,½<u>fXfe□[f^fX</u>,ð,P,Š",è"−,Ä,é,±,Æ,ª,Å,«,Ü,·∏BfXfe□[f^fX,ĺ∏A—á,¦,ĺ∏A ‰æ'œ,ÌfXfLfff"[]AfŒf^fbf`[]A[]C[]³[]A‰ü'ù'†,È,Ç[]AfŒfR[][fh,Ì[]ó'Ô,É,Ā,¢ ,Ä,Ì∏î•ñ,ð'ñ<Ÿ,μ,Ü,·∏B"o<sup>~</sup>^‰Â"\,ÈfXfe∏[f^fX– ¼,Í□A1,Â,ÌfJf^f□fO,Ĕ,Â,«□Å'å256ŒÂ,Å,ŪBfXfe□[f^fX-¼,ĺŽŸ,Ì,¢,,,ê,©,Ì•û-@,ÅŠ",è"-,Ä,é,± ,Æ,ª,Å,«,Ü,·⊓B  $[]Ef]f^f[]fOŽž,ÉffftfHf (fg,)fXfe[[f^fX-¼,ð<u>Ž©"®"l,É</u>"o<sup>~</sup>^,,é|]B$  $\Box E[f \oplus f R \Box [f h f v f \Box f p f e f B] f E f B f" f h f E, A \Box A f X f e \Box [f^f X - \frac{1}{4}, \delta Z e^{+} @, A^{+} o^{-}, \cdot, e \Box B$ fXfe[[f^fX-¼,ĺ'ljÁ[]A•Ï[]X[]A,¨,æ,Ñ[]í[]œ,Å,«,Ü,·[]B  $[V,\mu,cfXfe][f^{fX-\frac{1}{4}},\delta'C; (A,\cdot,c,E,I]A^E; Q,I]Ze][t,E]],c,U,\cdot]B$ 1. [f $\oplus$ fR[[fh]f[]fjf...[[, $\bigcirc$ ,c[fXfe[[f^fXfŠfXfg],ð'I'ð,µ,Ü,·]B [fXfe□[f^fXfŠfXfg]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B ffftfHf<fg,Å,Í□AfXfe□[f^fXfŠfXfg,É[fXfe□[f^fX],Æ,¢,¤-¼'O,ª•\ަ,³,ê,Ä,¢,Ü,·□B 2. [′}"ü],Ü,½,Í[′ljÁ],ðfNfŠfbfN,μ,Ä□A□V,μ,¢fXfe□[f^fX-¼,ð'ljÁ,μ,Ü,·□B  $\Box E[fXfe\Box[f^fX], i\Box\tilde{a}, E\Box V, \mu, cfXfe\Box[f^fX-\frac{1}{4}, \delta'C & A, \cdot, e, E, i\Box A['] & U, \delta fNfSfbfN, \mu, U, \Box B$ ΠV,μ,¢fEfBf"fhfE,ª•\ަ,³,ê,Ü,·ΠB 3. ŽŸ,ÌfXfe□[f^fX-¼,ð"ü—ĺ,·,é,É,ĺ□A['}"ü],Ü,½,ĺ[′ljÁ],ðfNfŠfbfN,μ,Ü,·□BfXfe□[f^fX-¼,ð,·,×,Ä"ü—ĺ,μ,½,ς∏A[OK],ðfNfŠfbfN,μ,Ü,·∏B Šù'¶,ÌfXfe∏[f^fX-¼,ð•Ï∏X,∙,é,É,Í∏A^ȉº,ÌŽè∏‡,É∏],¢,Ü,∙∏B 1. [fŒfR□[fh]f□fjf...□[,©,ç[fXfe□[f^fXfŠfXfg],ð'l'ð,μ,Ü,·□B [fXfe□[f^fXfŠfXfg]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B fŠfXfg,©,ç□A•Ï□X,μ,½,¢fXfe□[f^fX-¼,ð'l'ð,μ□A[•Ï□X],ðfNfŠfbfN,μ,Ü,·□B [fXfe□[f^fX,Ì•Ï□X] fEfBf"fhfE,ª•\ަ,³,ê,Ü,·□B 3. fXfe□[f^fX-¼,ð•Ò□W,μ□A[OK],ðfNfŠfbfN,μ,Ü,·□B fXfe□[f^fX,ð□í□œ,·,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü.·□B 1. fJf^f□fO,ðŠJ,«,Ü,·□B 2. [f@fR[fh]f[fi]fif...[c], c, c[fXfe $[f^{fXfSfXfg]}, \delta'I'\delta, \mu, \ddot{U}, \Box B$ [fXfe□[f^fXfŠfXfg]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B 3. fŠfXfg,©,ç□A□í□œ,μ,½,¢fXfe□[f^fX-¼,ð'l'ð,μ□A[□í□œ],ðfNfŠfbfN,μ,Ü,·□B

{button ,AL(`records',0,`',`')} <u>ŠÖ~A $\Box$ €-Ú</u>

### <sup>∭</sup>fŒfR□[fh,ÌŽg—p [fŒfR□[fh]f|fbfvfAfbfvf□fjf...□[,ÌŽg—p

fRf}f"fh	<b>]à-¾</b>
fJfbfg	ʻl'ð∙"∙ª,ð□Ø,èŽæ,è□AfNfŠfbfvf{□[fh,ÉfRfs□[,μ ,Ü,·□B
fRfs <u></u> [	ʻl'ð•"•ª,ðfNfŠfbfvf{[[[fh,ÉfRfs[][,μ,Ü,·[]Β
fy□[fXfg	fNfŠfbfvf{[[[fh,Ì"à— e,ð[]V,µ,¢[]ê[]Š(f]Jf^f[]fO,È,Ç),É"è•t, <sup>-</sup> ,Ü,·[]B
<u> </u>	<u>fTf€flfCf</u> <,ð[]Ä•` ‰æ,µ[]A[ <u>fŒfR[][fhfvf[]fpfefB]</u> fEfBf"fhfE,É•\ ަ,³,ê,éflfŠfWfif <ftf@fcf<,ìž[],â,∙,×,ä,ì[]î•ñ,ð[]x []V,µ,Ü,·[]B</ftf@fcf<,ìž[],â,∙,×,ä,ì[]î•ñ,ð[]x 
	□Ú□×,Í□A□ufŒfR□[fh,Ì□X□V□v,ðŽQ□Æ,μ,Ä,- ,¾,³,¢□B
<u>fŠftf@fŒf"f</u> <u>X,ðŠm"F</u>	ftf@fCf‹,Ì, ,é[ê[ĬŠ,Ö,ÌfŠftf@fŒf"fX,ð[]X[]V,μ,Ü,· []BCumulus,ªftf@fCf‹,ð"Á'è,Å,«,È,¢[]ê[]‡,Í[]Af†[] [fU,É[]V,μ,¢[]ê[]Š,ðŽw'è,∙,éf_fCfAf[]fOf{fbfNfX, ª•\ަ,³,ê,Ü,∙[]B
	□Ú□×,Í□A□uftf@fCf‹fŠftf@fŒf"fX,ÌŠm"F□v,ðŽ Q□Æ,µ,Ä,,¾,³,¢□B
<u>fŒfR□[fh,ð</u>	ʻl'ð,³,ê,Ä,¢,éfŒfR□[fh,ð□í□œ,μ,Ü,·□B
	[]Ú[]×,Í[]A[]ufJf^f[]fO,©,çfŒfR[][fh,ð[]í[]œ,∙,é[]v ,ðŽQ[]Æ,μ,Ä,,¾,³,¢[]B
fTf€flfCf<,ð ‰ñ"]	ʻl'ð,μ,½fTf€flfCf<,ð□A□¶,É90□<□A‰E,É90□<□A, ,é,¢,Í180□<‰ñ"],μ,Ü,·□B
<u>fTf€flfCf&lt;,ð'</u> <u>N-³⁄₄,É</u>	fTf€flfCf<,Ì∙\ަ,ð□Å"K ‰»,μ,Ü,·□B□Ú□×,Í□A□ufTf€flfCf<∙\ ަ,ðŒ©,â,·,,·,é□v,ðŽQ□Æ,μ,Ä,,¾,,³,¢□B
flfŠfWfif<,ð ŠJ,	fvfŒfrf…□[ •\ަ,Ü,½,Í <u>•Ò□W</u> ,ð□s,¤ ,½,β□Aftf@fCf‹,Ì□ì□¬fvf⊡fOf‰f€ ,ð <n"®,μ,ü,·⊡b< td=""></n"®,μ,ü,·⊡b<>
	□Ú□×,Í□A□uftf@fCf<,Ì∙Ò□W□∨,ðŽQ□Æ,μ,Ä,- ,¾,³,¢]B.
flfŠfWfif<,ð ^ó∏ü	flfŠfWfif <ftf@fcf<,ð<u>^ó□ü,∙,é,½,β□Aftf@fCf&lt;,Ì□ì□ ¬f∨f⊡fOf‰f€,ð<n"®,μ,ü,·□b< td=""></n"®,μ,ü,·□b<></ftf@fcf<,ð<u>
	□Ú□×,Í□A□u'¼,Ìfvf□fOf‰f€ ,©,çftf@fCf‹,ð^ó□ü,∙,é□v,ðŽQ□Æ,μ,Ä,,¾,³,¢□B
fGfNfXf∨f∏ ∏[f‰	<u>Windows,ÌfGfNfXfvf□□[f‰,Åftf@fCf‹,Ì□ê□Š,ð∙\</u> <u>Ž</u> ¦,±,Æ,ª,Å,«,Ü,·□B□Ú□×,Í□A□ufGfNfXfvf□□[f‰ ,Åftf@fCf‹,ð"Á'è,·,é□v,ðŽQ□Æ,µ,Ä,,¾,³,¢□B
flfŠfWfif<,ðf Rfs∏[	<u>ftf@fCf‹,ðŽw'è,µ,½□ê□Š,ÉfRfs□[</u> ,µ,Ü,·□B □Ú□×,Í□A□uftf@fCf‹,ÌfRfs□[□v,ðŽQ□Æ,µ,Ä,-

,¾,³,¢∏B

flfŠfWfif<,ð ^Ú"®	<u>ftf@fCf&lt;,ð∏V,µ,¢∏ê∏Š,ÉfRfs∏[</u> ,µ∏AŒ³,Ì]ê∏Š,©, ç,»,Ìftf@fCf<,ð∏í]œ,µ,Ü,· <u>∏</u> B
	□Ú□×,Í□A□uftf@fCf<,Ì^Ú"®□v,ðŽQ□Æ,μ,Ä,- ,¾,³,¢□B
flfŠfWfif<,ðf □□[f<,É"Y∙t	<u>"dŽqf∏∏[f‹,Ì"Y∙tftf@fCf‹,Æ,µ,Äftf@fCf‹</u> ,ð'— []M,µ,Ü,·[]B
	□Ú□×,Í□A□u"dŽqf□□[f<,ðŽg— p,μ,Äftf@fCf<,ð'—□M,∙,é□v,ðŽQ□Æ,μ,Ä,- ,¾,³,¢□B
fvfŒfrf…[][	ftf@fCf<,Ì <u>f∨fŒfrf…∏</u> ,ð∙\ަ,μ,Ü,∙ <u></u> ]Β
	□Ú□×,Í□A□ufvfŒfrf…□[,Ì∙\ަ□v,ðŽQ□Æ,μ,Ä,- ,¾,³,¢□B
<u>f∨f∏fpfefB</u>	[ <u>fŒfR□[fhfvf□fpfefB</u> ]fEfBf"fhfE,ð•\ަ,µ,Ü,·□B □Ú□×,Í□A□u[fŒfR□[fhfvf□fpfefB]fEfBf"fhfE,Ì•\ ަ□v,ðŽQ□Æ,µ,Ä,,¾,³,¢□B

[fŒfR[][fh]f|fbfvfAfbfvf[]fjf...[][,ð•\ަ,·,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

 $1. f \oplus f \mathbb{R}_{[fh, \hat{I}_{Tf} \oplus f]_{f} C_{f^{\prime}}, \hat{U}, \frac{1}{2}, \hat{I}_{f} S_{f} X_{f} g, \hat{I}_{[a}, \hat{E}_{f}]_{[f^{\prime}, \delta^{\prime} U^{\prime} \otimes , \mu_{a} A_{b} E_{f}]} A_{b} E_{f} X_{f} \{f^{\prime}, \hat{A}_{f} N_{f} S_{f} B_{f} N, \mu, \hat{U}, \frac{1}{2} B_{f} N, \mu, \hat{U},$ 

 $[f \textcircled{E} f \verb!R[][fh]f|fbfvfAfbfvf[]fjf...[[,]]{\bullet} `` \Label{eq:started} \check{Z}_{!}, ", \hftered, here a constraint of the started start$ 

2. fRf}f"fh,ðfNfŠfbfN,μ,Ü,·∏B

{button ,AL(`records',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

ŒŸ∏õ

 $\underline{\mathbb{C}} \underline{\mathbb{C}} \underline{\mathbb$ 

#### ₩ŒŸ<u>□</u>õ ŒŸ<u>□</u>õ,ÌŠT—v

 $Cumulus, \ensuremath{\sc limit lim$ 

- []E "Á'è,Ì<u>f]fefSfŠ</u>,É^ê'v,∙,éfŒfR[][fh,ðŒŸ[]õ,∙,é
- []E <u>@Ÿ[]õfc[][f<fo[[</u>,ðŽg—p,μ,Ä[]A1,Â,Ü,½,Í•i[]",Ì@Ÿ[]õ[]ð@[],Å[]\ []¬,³,ê,é@Ÿ[]õfNfGfŠ,Å@Ÿ[]õ,·,é[]B,Ü,½[]AŽ©•ª,Å[]ì,Á,½<u>@Ÿ[]õfNfGfŠ,ð•Û'¶</u>,·,é,± ,Æ,à,Å,«,é[]Bf@fR[][fh,Ì@Ÿ[]õ,É,Í[]A2,Â,ÌŠî-{"I,È•û-@,ª,,é[]B

□E <u>ŠÈ^ÕŒŸ□õ</u>

<u>□E •;□‡ŒŸ□õ</u>

□E fJf^f□fOfEfBf"fhfE,ð<u>fuf‰fEfY</u>,·,é

•K—v,ɉž,¶,Ä□ã<L,Ì•û-@,ðŽg,¢•ª,⁻,ĉº,³,¢□B

{button ,AL(`search',0,`',`')} <u>ŠÖ<sup>~</sup>A $\square \in -U</u>$ </u>

### ₩ŒŸΠõ ŒŸ∏õfc∏[f<fo∏[,ÌŽg—p

Cumulus,  $\hat{U} = \hat{U}  ,Æ,ª,Å,«,Ü, ∏BffftfHf,fg,Å,Í∏AŒŸ∏õfc∏[f,fo∏[,ÍCumulusfAfvfŠfP∏[fVf‡f"fÉfBf"fhfE,Ì^ê"Ô∏ã∏Afc∏[ ſ<fo[[,Ì,·,®‰º,Ě•\ަ,³,ê,Ü, ]BŒŸ[]õfc[[ʃ<fo[[,Í•Ê,Ì^Ê'u,Éfhf‰fbfO,Å,«[A•\ަf[]fjf... \_\_\_,Ì[ŒŸŽ@fc□[f<fo□[],ðfNfŠfbfN,μ,Ä□AŒŸ□õfc□[f<fo□[,ð•\ަ,μ,½,è"ñ•\ަ,É,·,é,± ,Æ,ª,Å,«,Ü,·□B,Ü,½ŒŸ□õf□fjf…□[,ÌfRf}f"fh,ðŽg,Á,Ä□A[<u>ŒŸ□õ□ðŒ</u>]] ,Ü,½,Í[<u>fNfGfŠ]</u>ftfB∏[f<fhŠÔ,Å∏Ý'è,ð∏Ø,è'Ö,¦,é,±,Æ,ª,Å,≪,Ü,·∏B

·ŒŸ□õfc□[f<fo□[,Í□A3,Â,ÌŠî-{fRf"f|□[flf"fg,Å□\□¬,³,ê,Ä,¢,Ü,·□B,±,ê,ç,ÌfRf"f|□[flf"fg,ðŽg p,μ,Ä□AŒŸ□õfNfGfŠ,ð□ì□¬,∙,é,±,Æ,ª,Å,«,Ü,·□B

 $\exists E [@YDõDð@DJf{f^f", I@YDõfcD[f foD[, ID¶'[, É, , Á, Ä@YDõDð@D, ID", ð@^, B, Ü, DB@YDÕfNfGfŠ, I$ []",<sup>a</sup>,·,Å,É•;[]"[]Ý'è,³,ê,Ä,¢,é[]ê[]‡,ÍŒ»[]Ý,ÌŒŸ[]õ[]ðŒ[],Ì—×,É∙\ަ,³,ê,Ü,·[]B

ŒŸ	]õf{f	`^f"
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<@**"**\

□ðŒ∏,ð'ljÁ	□V,μ,¢□ðŒ□,ðŒ»□Ý,Ì□ðŒ□,Ì□ã,É'Ç ‰Á,μ,Ü,·□B
[]ðŒ[],ð'}"ü	□V,μ,¢□ðŒ□,ðŒ»□Ý,Ì□ðŒ□,Ì ‰º,ɒljÁ,μ,Ü,·⊡B
]ðŒ],ð]í]œ	Œ»[]Ý,Ì[]ðŒ[],ð[]í[]œ,µ,Ü,·[]B
,∙,×,Ä,Ì <u>□</u> ðŒ <u>□</u> ,ð <u>□</u> í <u></u> ]œ	,∙,×,Ä,Ì□ðŒ□,ð□í□œ,µ,Ü,·□B
[]ðŒ[],ð∙;[]»	Œ»□Ý,Ì□ðŒ□,ðfRfs□[,µ,Ü,·□B

□E 3,Â,ÌŒŸ□õ□€–ÚftfB□[f<fh□iŒŸ□õfc□[f<fo□[,Ì'†‰>□j,Å□AŒŸ□õ,ð□\'z,Å,«,Ü,·□B

ŒŸ∏õ∏ðŒ∏ftfB∏[f<fh <@"\

		-
	[ŒŸ <u>∏</u> õ <u>∏</u> €-Ú]	ŒŸ[]õ'Î[]Û([fŒfR[][fh– ¼][]A[ftf@fCf<– ¼][]A[ftf@fCf‹Œ`Ž®][]A[‰æ'œf,[] [fh],È,Ç),ðŽw'è,µ,Ü,·
	[ŒŸ <u>□</u> õ‰‰ŽZŽq]	Œϔ <u>Π</u> õŒ`'Ô([ŠÜ,Þ] <u>Π</u> Α[Žn,Ü,é] <u>Π</u> Α[^ê 'v,·,é] <u>Π</u> Α[^Ù,È,é],È,Ç) ,ðŽw'è,μ,Ü,· <u>Π</u> Β
	[ŒŸ <u>□</u> õ′I]	Œê'S'Ì,Ü,½,ĺ,»,̈ê∙"□A□"'l□A"ú∙t,È ,ÇŒŸ□õ,∙,é'l,ðŽw'è,µ,Ü,∙⊡B
□E ,S,Â,ÌŒŸ⊡ċ , ,ê,© ,ðfN	õf{f^f",ĺ[]AŒŸ[]õfc[][f‹fo[] fŠfbfN,·,é,Æ[]AŒŸ[]õ,ªŽÀ[	[,̉E'¤,É∙\ަ,³,ê,Ü,·□B,±,ê,ç,Ìf{f^f",Ì,¢ ]s,³,ê,Ü,·
	ŒŸ <b>□õf</b> {f^f"	<@ <b>"</b> \
	<b>M</b> [ŒŸ <u>□</u> õ]	fAfNfefBfu,ÈfJf^f∏fO'†,Ì,∙,×,Ä,ÌfŒf R∏[fh,ÌŒŸ∏õ,ð∏s,¢,Ü,∙
	dh	(ĒŅ□Ý•\Ž!³ÂÄ¢

<u>∎[</u>∏ÄŒŸ∏õ] ,éfĒfR□[fh,Ì'†,©,ç,μ,Ú,è□ž,ÝŒŸ□õ, ð<u></u>]s,¢,Ü,∙<u>]</u>B

ŠJ,©,ê,Ä,¢ ·,×,Ä,ÌfJf^f⊡fO,ðŒ ,é́,∙,×,Ä,ÌfJf^f□fO,ÅfŒfR□[fh,ðŒŸ□

# **∰**[ŒŸ[]õ‰ð[]œ]

 $\tilde{o},\mu,\ddot{U},\cdot\squareB$ fAfNfefBfu,ÈfJf^f□fO'†,Ì,·,×,Ä,ÌfŒf R□[fh,ð•\ަ,µ,Ü,·□B

ŒŸ∏õ,Ì∙û-@,É,ĺ2Ží—Þ, ,è,Ü,·∏B

<u>□E ŠÈ^ÕŒŸ□õ</u>

<u>□E •;□‡ŒŸ⊡õ</u>

$$\begin{split} & \textcircled{CY} \_ \widetilde{O}fNfGfŠ, i &= \acute{a}, \acute{e}, \acute{a}, \acute{e}, \ddot{a}, i \_ A \_ u \_ \underline{CY} \_ \widetilde{O}fNfGfŠ, i &= \acute{a} \_ v, ð ŽQ \_ \mathcal{E}, \mu, \ddot{a}, -, \overset{3}{4}, \overset{3}{,} \acute{e} \_ B \_ i \_ \neg, \mu, \overset{1}{2} \_ \underline{CY} \_ \widetilde{O}fNfGfŠ, \widetilde{\delta} \bullet \underbrace{\hat{U'} \_}_{A}, \overset{4}{,} . \overset{6}{,} \overset{7}{,} {button ,AL(`search',0,`',`')}  $\underline{\check{S}\ddot{O}^{-}A\square \in -\acute{U}}$ 

#### ŴŒŸ□õ ŴŒŸ□õfc□[f‹fo□[,ÌŽg—p ŒŸ□õ⊡€-ÚftfB□[f‹fh,ÖftfH□[fJfX,ð•Ï□X

ŒŸ□õf□fjf...□[,©,ç[ŒŸ□õ□€–ÚftfB□[f‹fh,Ö],ð'l'ð,·,é,Æ□AŒŸ□õfc□[f‹fo□[,Ì□AŒ»□ÝfJ□[f\ f‹,ª'}"ü,³,ê,Ä,¢,錟□õ□ðŒ□,ªfAfNfefBfu,É,È,è,Ü,·□B,±,ê,Í□A•¡□‡ŒŸ□õ,Å□AŒŸ□õ□ðŒ□,ª'½,¢ ,Æ,«,ÉŽg—p,·,é,ƕ֗~,Å,·□B

#### ₩ŒŸ□õ ₩ŒŸ□õfc□[f‹fo□[,ÌŽg—p fNfGfŠftfB□[f‹fh,ÖftfH□[fJfX,ð•Ï□X

#### ŴŒŸ□õ ŴŒŸ□õfc□[f‹fo□[,ÌŽg—p ŠÈ^ÕŒŸ□õ,ÌŽÀ□s

ŠÈ^ÕŒŸ□õ,É,Í□AŒŸ□õ□ðŒ□,Í1,Â,μ,©, ,è,Ü,¹,ñ□BŒŸ□õŒ<‰Ê,Ì″Í^Í,ð□i,é,É,Í□AŠÈ^ÕŒŸ□õ,Æ[□Ä ŒŸ□õ]ƒ{ƒ^f",𕹗p,μ,Ü,·□BŒŸ□õfNfGfŠ,Ì—á,É,Â,¢,Ä,Í□A□u<u>ŒŸ□õfNfGfŠ,Ì—á</u>□v,ðŽQ□Æ,μ,Ä,-,¾,³,¢□B

#### ŠÈ^ÕŒŸ[]õ,ðŽÀ[]s,·,é,É,Í^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

- ŒŸ□õ□€-ÚftfB□[f<fh,©,çfŒfR□[fh-¼□Aftf@fCf<Œ`Ž®□AfJf‰□[f,□[fh,È,Ç,ÌŒŸ□õ□€-Ú,ð'I,Ñ,Ü,·□B
- ŒŸ□õ‰‰ŽZŽqftfB□[f<fh,©,猟□õ‰‰ŽZŽq,ð'l'ð,µ,Ü,·□B</li>
- ŒŸ□õ'lftfB□[f<fh,É□AŒŸ□õ,É—p,¢,éŒê□i,à,µ,,ĺ,»,Ì^ê•"□j□A□"□A"ú•t,È,Ç,ð"ü—ĺ,µ,Ü,· fŒfR□[fh,ð'lftfB□[f<fh,Éfhf‰fbfO,·,é,Æ□AŒŸ□õ□€-Ú,É'Ήž,·,éfŒfR□[fh□î•ñ,ðŠÈ'P,É"ü ĺ,Å,«,Ü,·□B,·,×,Ä,ÌŒŸ□õ'lftfB□[f<fh,ðfNfŠfA,·,é,É,Í□í□œ,ðfNfŠfbfN,µ,ĉ<sup>Q</sup>,³,¢□B.
- 4. "K□Ø,ÈŒŸ□õf{f^f"□iŒŸ□õ□A□ÄŒŸ□õ□A,·,×,Ä,ÌfJf^f□fOŒŸ□õ□j,ðfNfŠfbfN,μ,Ü,·□B

<u>f@fR\_l[fhfEfBf"fhfE</u>,É[]AŒŸ[]õ[]ðŒ[],É^ê'v,·,é,·,×,Ä,ÌfŒfR[][fh,ª•\ަ,³,ê,Ü,·[]B<u>fXfe[][f^fXfo[]</u>,Ì ‰E'¤,É, ,éfŒfR[][fhfXfe[][f^fXftfB[][f‹fh,É,Í[]AŒŸ[]õ[]ðŒ[],É[]‡'v,µ,½fŒfR[[fh[]",ª•\ ަ,³,ê,Ü,·[]B,½,Æ,¦,Î[]A25/ 117(1'l'ð),Æ,Í

□E Œ»□Ý,ÌŒŸ□õ□ðŒ□,É25Œ□,ª□‡'v,,é

 $\label{eq:linear} \begin{array}{c} & & & \\ & &$ 

□E 1Œ□,ÌfŒfR□[fh,ªŒ»□Ý'I'ð,³,ê,Ä,¢,é

{button ,AL(`search',0,`',`')} <u>ŠÖ~A $\Box \in -\dot{U}$ </u>

#### ₩ŒŸ□õ ₩ŒŸ□õfc□[f‹fo□[,ÌŽg—p •¡□‡ŒŸ□õ,ÌŽÀ□s

•¡□‡ŒŸ□õ,É,Í2,Â^È□ã,ÌŒŸ□õ□ðŒ□,ð'g,Ý□‡,í,¹,ÄŒŸ□õ,µ,Ü,·□BŒŸ□õfNfGfŠ,Ì—á,É,Â,¢ ,Ä,Í□A□u<u>ŒŸ□õfNfGfŠ,Ì—á</u>□v,ðŽQ□Æ,µ,Ä,,¾,³,¢□B

#### •¡□‡ŒŸ□õ,ðŽw'è,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

- 1.  $\mathbb{C}$ <sup>Y</sup> $\square$ <sup>0</sup>,  $É \bullet K v$ ,  $E \mathbb{C}$ <sup>Y</sup> $\square$ <sup>0</sup> $\square$ <sup>0</sup> $\mathbb{C}$  $\square$ ,  $\delta \square$ <sup>Y</sup> $^{<math>2$ </sup>,  $\mu$ , U,  $\Box B$ 
  - $[E 'l'ð, ], \hat{e}, \ddot{A}, \hat{e}, \acute{e}] \delta \oplus ], \dot{l}] \tilde{a}, \acute{e} \oplus \ddot{V}] \tilde{o} ] \delta \oplus ], \delta' \dot{C} \& \dot{A}, \cdot, \acute{e}, \acute{e}, \acute{l}] A [] \delta \oplus ], \delta' \dot{V} \& \dot{A}, \cdot, \dot{e}, \dot{E}, \dot{h} ] A [] \delta \oplus ], \delta' \dot{V} \& \dot{A}, \cdot, \dot{e}, \dot{E}, \dot{h} ] A [] \delta \oplus ], \delta' \dot{V} \& \dot{A}, \cdot, \dot{e}, \dot{E}, \dot{h} ] A [] \delta \oplus ], \delta' \dot{V} \& \dot{A}, \cdot, \dot{e}, \dot{E}, \dot{h} ] A [] \delta \oplus ], \delta' \dot{V} \& \dot{A}, \cdot, \dot{e}, \dot{E}, \dot{h} ] A [] \delta \oplus ], \delta' \dot{V} \& \dot{A}, \cdot, \dot{E}, \dot{A} [] A [] \delta \oplus ], \delta' \dot{V} \& \dot{A}, \cdot, \dot{E}, \dot{A} [] A [] \delta \oplus ], \delta' \dot{A} [] \dot{$
  - []E 'l'ð,<sup>3</sup>,ê,Ä,¢,é[]ðŒ[],̉<sup>Q</sup>,ÉŒŸ[]õ[]ðŒ[],ð'ljÁ,·,é,É,Í[]A[[]ðŒ[],ð'ljÁ] ,ðfNfŠfbfN,µ,Ü,·[]B

ΠE

$$\begin{split} & \mathbb{E}^{0} = \delta = \left[ \delta_{0}^{0} \otimes \delta_{1}^{0} - 1"Ô-Ú,ÌŒŸ□õ□ðŒ□,É'Î,μ,Ä□A^ȉº,ðŽÀ□s,μ,Ü,·
  - $\begin{array}{ll} & [ \textcircled{\sc r} \end{tabular} \begin{tabular}{ll} \hline \sc r} \end{tabular} & [ \fbox{\sc r} \end{tabular} \begin{tabular}{ll} \hline \sc r} \begin{tabular}{ll} & [ \fbox{\sc r} \end{tabular} \begin{tabular}{ll} \hline \sc r} \begin{tabular}{ll} \hline \sc r} \begin{tabular}{ll} \hline \sc r} \begin{tabular}{ll} \hline \sc r} \begin{tabular}{ll} & \end{tabular} \begin{tabular}{ll} \hline \sc r} \begin{tabular}{ll} \begin r} \begin r \begi$
  - $\Box E \ [ \textcircled{C} Y \Box \delta w & ZZZq ] ftfB \Box [f < fh, @, c \textcircled{C} Y \Box \delta w & ZZZq, \delta' I' \delta, \mu, U, \cdot ]$
  - □E [ŒŸ□õ'l]ftfB□[f<fh,Å□AŒŸ□õ,É—p,¢,éŒê□i,à,µ,,ĺ,»,Ì^ê•"□j□A□"□A"ú•t,⁻,È,Ç,ð"ü ĺ,µ,Ü,·□B
- 3. [•¡□‡ŒŸ□õ□ðŒ□Œ<□‡Žq]ftfB□[f<fh,©,ç[,©,Â],Ü,½,Í[,Ü,½,Í],ð'l'ð,μ,Ü,·□B
  - $[E [, @, Â], \delta' l' \delta, \cdot, \acute{e}, \pounds [A \frac{1}{4} \bullet \hat{u}, \dot{I} C \ddot{Y} ] \tilde{o} [\delta C \dot{E} \dot{A}, \cdot, \acute{e}f C f R [fh, \frac{3}{4}, -, \frac{3}{4} C \ddot{Y} ] \tilde{o}, ^{3}, \hat{e}, \ddot{U}, \cdot ] B$
  - □E [,Ü,½,ĺ],ð'l'ð,,é,Æ□A,¢
    ,,ê,©,ÌŒŸ□õDðŒ□,É^ê'v,,éfŒfR□[fh,ªŒŸ□õ,³,ê,Ü,·□B[,Ü,½,ĺ]ŒŸ□õ,Ì•û,ªŒŸ□õ'Î□Û,ª□L
    ,□A'Ê□í,ĺ^ê'v,,éfŒfR□[fh□",ª'½,,È,è,Ü,·□B.
- - □E [ŒŸ□õ□€-Ú]ftfB□[f<fh,©,猟□õ'Î□Û([fŒfR□[fh]□A[-¼'O]□A[ftf@fCf<Œ`Ž®]□A[‰æ'œf,□[fh],È,Ç),ð'l'ð,µ,Ü,·□B</p>
  - \_E [ŒŸ□õ‰‰ŽZŽq]ftfB□[f<fh,©,猟□õ‰‰ŽZŽq,ð'l'ð,μ,Ü,·□B
  - [ŒŸ□õ'l]ftfB□[f<fh,Å□AŒŸ□õ,É—p,¢,éŒê□i,à,µ,,ĺ,»,lˆê•"□j□A□"□A"ú•t,⁻,È,Ç,ð"ü ĺ,µ,Ü,·□B

'□: ['}"ü]□A['Ç ‰Á]□A,¨,æ,Ñ[□í□œ]f{f^f",ðŠÜ,Þf{fbfNfX,ª□AŒ»□ÝfAfNfefBfu,ÈŒŸ□õ□ðŒ□,Ì—×,É•\ ަ,³,ê,Ü,·□B

- 5. ,·,×,Ä,ÌŒŸ□õ□ðŒ□,É'Î,µ,Ä□AŽè□‡3,¨,æ,Ñ4,ðŽÀ□s,µ,Ü,·
- "K□Ø,ÈŒŸ□õf{f^f"([ŒŸ□õ]□A[□ÄŒŸ□õ]□A[,·,×,Ä,ÌfJf^f□fO,ðŒŸ□õ]□A[ŒŸ□õ‰ð□œ]) ,ðfNfŠfbfN,µ,Ü,·□B

fJf^f[]fOfEfBf"fhfE,É[]AŠY"-,·,é,·,×,Ä,ÌfŒfR[][fh,ª•\ަ,³,ê,Ü,·[]BfXfe[][f^fXfo[][,̉E,É, ,éfŒfR [][fhfXfe[][f^fXftfB[][f‹fh,É,Í[]AŒŸ[]õ[]ðŒ[],É^ê'v,μ,½fŒfR[][fh[]",ª•\ ަ,³,ê,Ü,·[]B,½,Æ,¦,Î[]A[25/ 117 (1'I'ð)],Í^ȉº,Ì,æ,¤,È^Ó-¡,É,È,è,Ü,·[]B

- $\label{eq:constraint} \begin{array}{ll} & \mathbb{E} & 25 \\ & \mathbb{E} & \hat{h} \\ & \mathbb{E} & \mathbb{E} \\ &$
- □E Œ»□Ý,ÌfJf^f□fO,É□‡Œv117ŒÂ,ÌfŒfR□[fh,ªŠÜ,Ü,ê,Ä,¢,é
- □E 1œÂ,Ìf@fR□[fh,ª'l'ð,³,ê,Ä,¢,é

{button ,AL(`search',0,`',`')} <u>ŠÖ~A $\Box \in -U</u>$ </u>

#### ₩ŒŸ□õ ₩ŒŸ□õfc□[f‹fo□[,ÌŽg—p ŒŸ□õfNfGfŠ,Ì—á

'S•¶ŒŸ□õ,Å,ĺ□AŒê,Ì^ê•",Ü,½,ĺ'S•"□A□"Žš□A,Ü,½,ĺ"ú•t,ª□A'å•¶Žš,Æ□¬•¶Žš,ÉŠÖŒW,È,-ŒŸ□õ,³,ê,Ü,·□B^ȉº,Ì—á,ĺ□A,³,Ü,´,Ü,ÈfŒfR□[fh"Á□«,ðŽg,Á,ÄfŒfR□[fh,ðŒŸ□õ,·,é•û-@,ðަ,μ,Ä,¢,Ü,·□B,½,Æ,¦,Î□Ar\_s,ÅŒŸ□õ,·,é,Æ□A[for single],ªŒŸ□õ,³,ê,Ü,·□B

ŒŸ <u>□</u> õ'Î□ Û	Žg—p,∙,錟 <u>□</u> õ‰ ‰ŽZŽq	"ü—ĺ"à—e
fŒfR∏[fh -¼	を含む で始まる と一致する と異なる 参会まない	1Œê,Ü,½,ĺŒê,Ì^ê∙",ð"ü— ĺ,µ,Ä'S∙¶ŒŸ∏õ,ð⊡s,¢,Ü,∙∏B
ftf@fCf‹ Œ`Ž®	2-1975 24/23	f  fbfvfAfbfvfŠfXfg,©,çftf@fCf< Œ`Ž®,ðʻl'ð,∙,é,©∏AfL□[f{□[f h,Å"ü—ĺ,μ,Ü,∙⊡B
‰æ'œf, [[fh	と一致する と異なる	fŠfXfg,©,ς[f ‰fCf"fA□[fg]□A[fOfŒfCfXfP □[f<]□A[fJf‰□[],Ì,¢ ,_,ê,©,ð'l'ð,µ,Ü,·□B
‰ð'œ"x	<del>読</del> 活 以下 と一致する と異なる 以上 まこえろ	□"'I,Ü,½,Í <u>‱𑜓x</u> (dpi),ð"ü —Í,μ,Ü,·∏B
ftf@fCf <f< td=""><td>表演</td><td>fofCfg[]",ð"ü—ĺ,µ,Ü,∙[]B</td></f<>	表演	fofCfg[]",ð"ü—ĺ,µ,Ü,∙[]B
TfCfY	以一 と一致する と異なる 以上	<u>fLf⊓fofCfg</u> ,ÍKB,Æ"ü— Í,µ,Ü,· <u>⊟</u> B
	をこえる	<u>f⊡fKfofCf</u> g,ÍMB,Æ"ü— Í,µ,Ü,·⊡B
fŒfR∏[fh ,Ì∏C∏³"ú	と一致する と異なる より前 より後	flfyfŒ∏[fefBf"fOfVfXfef€ ,Å,Ì∏′Ž®,ðŽg—p,μ,Ä"ú•t,ð"ü —ĺ,μ,Ü,·∏B
ftf@fCf‹,Ì □ì□¬"ú	と一致する と異なる より前 より後	flfyfŒ∏[fefBf"fOfVfXfef€ ,Å,Ì∏′Ž®,ðŽg—p,μ,Ä"ú•t,ð"ü —ĺ,μ,Ü,·∏B
f{fŠf [[f€-¼	を含む で始まる と一致する と異なる を含まない	Œê'S'Ì,Ü,½,Í,»,Ì^ê•",ð"ü— Í,µ,Ä□A'å•¶Žš□¬•¶Žš,ð<æ•Ê ,µ,È,¢'S•¶ŒŸ□õ,ðŽÀ□s,µ,Ü,· □B
ftf@fCf<- ¼	を含む で始まる と一致する と異なる を含まない	Œê'S'Ì,Ü,½,Í,»,Ì^ê•",ð"ü— Í,µ,Ä□A'å•¶Žš□¬•¶Žš,ð<æ•Ê ,µ,È,¢'S•¶ŒŸ□õ,ðŽÀ□s,µ,Ü,· □B
ftfHf <f ¼</f 	を含む で始まる と一致する と異なる を含まない	Windows,ÌfGfNfXfvf□□[f‰ ,Å•\ަ,³,ê,éftfHf‹f ¼'S'Ì,Ü,½,Í,»,Ì^ê•",ð"ü— ĺ,µ,Ü,·('å•¶Žš□¬•¶Žš,Ì‹æ•Ê,

		ĺ, ,è,Ü,¹,ñ) <u></u> B
f†[[fU-¼	を含む で始まる と当なする と異なる を含まない	Œê'S'Ì,Ü,½,Í,»,Ì^ê∙",ð"ü— Í,µ,Ä□A'å∙¶Žš□¬∙¶Žš,ð‹æ∙Ê ,µ,È,¢'S∙¶ŒŸ□õ,ðŽÀ□s,µ,Ü,· □В
fXfe⊡[f^f X	と一致する と異なる	fŠfXfg,©,çfXfe□[f^fX,ðʻl'ð,μ, Ü,·□B
fTf€flfCf‹	と似ている と異なる	fTf€flfCf‹,ð[ŒŸ□õ'l]ftfB□[f‹fh ,É <u>fhf‰fbfO&amp;fhf□fbfv</u> ,µ,Ä□A- ¾,é,³,¨,æ,ÑfRf"fgf ‰fXfg,ð"äŠr,∙,é—ÞŽ— ŒŸ□õ,ðŽÀ□s,µ,Ü,∙□B
∫]ƒeƒSƒŠ	を含む で始まる と当なする を含まない	fJfefSfŠ-¼,ð"ü— ĺ,∙,é,©∏AfJf^f∏fOfEfBf"fhfE, ©,çfJfefSfŠ,Ü,½,ĺfŒfR∏[fh,ðf hf‰fbfO,μ,Ä,,¾,³,¢∏B
		□d•i,·,éfJfefSfŠ-¼,ªfJfefSfŠ□\ □¬,ÉŠÜ,Ü,ê,Ä,¢,é[]ê[]‡,Í[]A- ¼'O,ð"ü— ĺ,¹, ,,ÉfJfefSfŠ,»,Ì,à,Ì,ðfhf ‰fbfO&fhf[]fbfv,μ,Ü,·[]B
		<u>[fAfvfŠfP□[fVf‡f"□Ý'è]f_fCfAf</u> <u>□fOf{fbfNfX</u> ,Å□Af]JfefSfŠ,ÌŒŸ□õ•û- @,ðŽw'è,µ,Ü,·□B□Ú□×,Í□A14 3fy□[fW,Ì□ufAfvfŠfP□[fVf‡f"□ Ý'è,Ì•Ï□X□v,ðŽQ□Æ,µ,Ä,- ,¾,³,¢□B
fm[[fg	と一致する と異なる	Œê,Ì^ê•",à,µ,,Í'S•",ð"ü— Í,µ,Ä'S•¶ŒŸ[]õ,ð[]s,¢ ,Ü,·[]B^ê,Â,ÌŒŸ[]õ[]ðŒ[],Å"ü —Í,Å,«,é"ú- {Œê,Ì•¶Žš[]",Í8•¶Žš,Ü,Å,Å,· []B

{button ,AL(`search',0,`',`')}  $\underline{\check{SO}^{\sim}A\square \in -\acute{U}}$ 

### ŴŒŸ<u>□</u>õ ŒŸ□õfNfGfŠ,Ì∙Û'¶



#### fAfNfefBfu,É,È,Á,Ä,¢,錟□õfNfGfŠ,ð•Û'¶,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

- $1. \quad \textcircled{EY} \_ \" of NfGf Šfo \_ [, Å \frac{1}{4} O, \delta" "u I, \mu \_ A [ \textcircled{EY} \_ of NfGf Š, \delta \bullet U ` \P ], \delta f Nf Šfb f N, \mu, U, \cdot \_ B$
- □V,µ,¢ŒŸ□õfNfGfŠ,ªŒŸ□õfNfGfŠfo□[,ÌfŠfXfg,É'ljÁ,³,ê,Ü,·□B

#### •Û'¶,µ,½ŒŸ□õfNfGfŠ,ðŽg—p,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,•□B

- ŒŸ□õfNfGfŠfo□[,Å□A•Û'¶,μ,½ŒŸ□õfNfGfŠ,ðfŠfXfg,©,ç'l'ð,μ,Ü,·□B ,»,ÌŒŸ□õfNfGfŠ,ª'}"ü,<sup>3</sup>,ê,Ü,·□B

#### •Û'¶,μ,½ŒŸ□õfNfGfŠ,ð□í□œ,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

- $1. \quad \textcircled{EY} \_ \" of NfGf \v Sfo \_ [, \& \_ A \_ i \_ \infty, \cdot, e \textcircled{EY} \_ of NfGf \v S, \eth ` I' \eth, \mu, Ü, \cdot \_ B$
- [ŒŸ□õfNfGfŠ,ð□í□œ]f{f^f",ðfNfŠfbfN,µ,Ü,·□B

,»,ÌfNfGfŠ,ª∏í□œ,³,ê□AŒŸ□õfNfGfŠfo□[,ÌfŠfXfg,©,ç□Á<Ž,³,ê,Ü,·□B

{button ,AL(`search',0,`',`')} <u>ŠÖ~A $\Box \in -\acute{U}$ </u>

### ŴŒŸ<u>□</u>õ ƒJfefSfŠŒŸ□õ,Ì□Ý'è,É,Â,¢,Ä

fJfefSfŠ,É,æ,錟□õ,Ì□ê□‡□A<u>[fAfvfŠfP□[fVf±f"□Ý'è]f\_fCfAf□fOf{fbfNfX,Ì[ŒŸ□õ]f^fu</u>,Å□A,³,Ü,´,Ü, ÈŒŸ□õ□Ý'è,ð□s,¤,±,Æ,ª,Å,«,Ü,·□B[fJfefSfŠŒŸ□õ],Å□A^ȉº,Ì,¢,¸,ê,©,ÌŒŸ□õ∙û–@,ð'l'ð,·,é,± ,Æ,ª,Å,«,Ü,·□B

- [L] ['l'ð,³,ê,½f]fefSfŠ,Ì'S,Ä,ÉŠY"-,·,é],Í□AŒŸ□õ□ðŒ□,ÉŠÜ,Ü,ê,éfJfefSfŠ,·,×,Ä,É'Î ‰ž,·,éfŒfR□[fh,ðŒŸ□õ,µ,Ü,·□B

[fJfefSfŠŒŸ[]õ],Å,Í[]AfJfefSfŠ,ÌŒŸ[]õ•ûŒü([[]ã^Ê,ÌfJfefSfŠ,ðŒŸ[]õ]]]A[‰º^Ê,ÌfJfefSfŠ,ðŒŸ[]õ],Ì,¢, ,,ê,©,Ü,½,Í—¼•û),ðŽw'è,·,é,±,Æ,ª,Å,«,Ü,·]B

[fJfefSfŠ,ÌfGfCfŠfAfX,ðŒŸ[]õ],ð—LŒø,É,·,é,Æ[]AfJfefSfŠ,ÌfGfCfŠfAfX,ðŒŸ[]õ,·,é,±,Æ,ª,Å,«,Ü,·[]B

{button ,AL(`search',0,`',`')}  $\underline{SO^{A} \oplus \underline{-U}}$ 

### ŴŒŸ<u>□</u>õ ŒŸ□õfRf"fpfXfAfCfRf",ÌŽg—p

—v<[],·,錟[]õŒ<‰Ê,ª"¾,ç,ê,È,¢[]ê[]‡,ĺ[]AŒ»[]Ý—LŒø,É,È,Á,Ä,¢,錟[]õ[]Ý'è,ð,± ,ÌfAfCfRf",ÅŠm"F,µ,Ü,·[]BfAfCfRf",ðfNfŠfbfN,·,é,Æ[]A[<u>fAfvfŠfP[][fVf±f"[]Ý'è]f\_fCfAf[]fOf{fbfNfX</u>,ð,· ,Î,â,•\ަ,μ[]A•K—v,ɉž,¶,ÄŒŸ[]õ[]Ý'è,ð•Ї[]X,·,é,±,Æ,ª,Å,«,Ü,·[]B

$$\begin{split} & \mathbb{E}^{T} = \hat{\mathcal{F}}_{\mathcal{F}}^{T} & = \hat{\mathcal{F$$

ーLŒø,É,È,Á,Ä,¢ ,錟□õ□Ý'è	fAfCfRf"
['l'ð,³,ê,½fJfefSfŠ,Ì,¢ ,¸,ê,©,ÉŠY"–,·,é]	\$
['l'ð,³,ê,½fJfefSfŠ,Ì'S,Ä,ÉŠY" –,∙,é]	<b>(</b>
[f]fefSfŠŒŸ[]õŽž,Ì'Î[]Û,Æ,È, éŠK'w] [[]ã^Ê,Ìf]fefSfŠ,ðŒŸ[]õ]	*
[fJfefSfŠŒŸ[]õŽž,Ì'Î[]Û,Æ,È, éŠK'w] [‰º^Ê,ÌfJfefSfŠ,ðŒŸ[]õ]	
[fJʃefSfŠ,ÌfGfCfŠfAfX,ðŒŸ∏õ ]	

{button ,AL(`search',0,`',`')}  $\underline{\check{SO}^{A} \square \underbrace{ - \acute{U}}$ 

### Ѿ҈ŒŸ□õ ƒJf^f□fOfEfBf"fhfE,Ìfuf‰fEfY

fJf^f□fOfEfBf"fhfE,Ìfuf‰fEfY,Í□AfŒfR□[fh,ð"Á'è,·,éŠÈ'P,Å^ê"Ê"I,È•û–@,Å,·□B,æ,□®— □,³,ê,½fJfefSfŠ□\'¢,ð□ÝŒv,µ,Ä,¢,ê,Î□AfJfefSfŠfŠfXfgfEfBf"fhfE,ÅfJfefSfŠ,ðŠK'w•\ ަ,·,é,¾,⁻,Å,·,Î,â,fŒfR□[fh,ð"Á'è,·,é,±,Æ,ª,Å,«,Ü,·□B

, ,éfJfefSfŠ,ª"o˜^,³,ê,½,·,×,Ä,ÌfŒfR□[fh,ð•\ ަ,·,é,É,Í□A,»,ÌfJfefSfŠ,ðf\_fuf‹fNfŠfbfN,μ,Ü,·□BfJfefSfŠ,ðŠK'w•\ަ,·,é,É,Í□AfJfefSfŠ-¼,Ì□¶,É, , é+f{f^f",ðfNfŠfbfN,μ,Ü,·□BfJfefSfŠ,ªŠK'w•\ަ,³,ê,é,Æ□A+f{f^f",ª-f{f^f",É,È,è,Ü,·□B

{button ,AL(`search',0,`',`')}  $\underline{\check{SO}^{A} \square \underbrace{ - \acute{U}}$ 

### ŴŒŸ<u>□</u>õ fJfefSfŠfŠfXfg,Ì∙\ަ

•\ަf□fjf…□[,©,ç[f]fefSfŠfo□[],ðʻlʻð,μ,Ä□AŒ»□Ý,ÌfJf^f□fO,É, ,é,·,×,Ä,ÌfJfefSfŠ,ðfŠfXfg,Å,«,Ü,·□ B[f]fefSfŠfo□[],Éf`fFbfNf}□[fN,ð"ü,ê,é,Æ□AfŒfR□[fhfEfBf"fhfE,Ì—×,ÉfJfefSfŠŠK'w,ª•\ ަ,³,ê,Ü,·□Bf`fFfbfN,ð,Í,\_,·,Æ□AfŒfR□[fhfEfBf"fhfE,¾,⁻,ª•\ަ,³,ê,Ü,·□B

{button ,AL(`search',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

## flfŠfWfif<,ÌŠÇ—∏

#### <sup></sup> <sup>¶</sup>flfŠfWfif‹,ÌŠÇ—□ fJf^f□fO,μ,½ftf@fCf‹,ÌfvfŒfrf...□[

flfŠfWfif‹ftf@fCf‹,ĺ,¢,Á,½,ñfJf^f□fO,·,é,Æ□A'¼,ÌfAfvfŠfP□[fVf‡f",ð‹N"®,¹,`,É,»,Ì<u>fvfŒfrf...</u> □[,ðŒ©,é,±,Æ,ª,Å,«,Ü,·□BfAfvfŠfP□[fVf‡f"□Ý'è,Å□AfTf€flfCf‹,ðf\_fuf‹fNfŠfbfN,·,ê,ÎfvfŒfrf... □[fEfBf"fhfE,ª‹N"®,·,é,æ,¤,É□Ý'è,·,é,±

,Æ,ª,Å,«,Ü,·[]B[]Ú[]×,Í[]u<u>fAfvfŠfP[][fVf‡f"[]Ý'è,Ìf][fXf^f}fCfY</u>[]v,ðŽQ[]Æ,µ,Ä,,¾,³,¢[]BfvfŒfrf... [][f,[][fh,Å,Í[]AfCf][][[fW,ð<u>fRfs[][</u>,µ,½,è<u>ó[]ü</u>,·,é,±,Æ,ª,Å,«,Ü,·[]B

 $fJf^f f f 0, \mu, \frac{1}{2} ftf 0 fCf^{,} fvf ff f... [[, \delta \bullet \langle Z |, \cdot, e, E, I | A^{E} ], c, U, \cdot ] B$ 

 $1. \ \underline{f \oplus f R}[\underline{f h f E f B f " f h f E}, A \Box A f v f \oplus f r f ... \Box [, \delta \bullet \backslash \mathring{Z} |, \cdot, \acute{e} f t f @ f C f <, \delta \mathring{Z} |, \cdot f \oplus f R \Box [f h, \delta ' l' \delta, \mu, Ü, \cdot \Box B ]$ 

2. [f@fR[[fh]f[]fj]...[[, $\bigcirc$ ,c[fvf@frf...[[],ð'l'ð,µ,Ü,·]B

 $[] \check{S} - L \check{Z} O, \dot{I} \times \check{Z} \otimes , \delta \check{Z} g - p, \cdot, \acute{e}ftf @ fCf < , \acute{E}, \acute{I} [\underline{fIf} \check{S} fW fif < , \delta \check{S}], ]fRf \} f"fh, \delta \check{Z} g - p, \mu, Ü, \cdot [] B$ 

 $ftf@fCf < fvf @ frf ... [[fEfBf"fhfE, <sup>a</sup> + \Ž|, <sup>a</sup>, ê, Ü, · []Bfvf @ frf ... [[, <math>\delta \underline{S} \underline{G}' \underline{a} \underline{A} \underline{A} \underline{b} \underline{A} \underline{b} \underline{A}, ^{a}, 
3. ŠJ,¢,Ä,¢,éfvfŒfrf...[[fEfBf"fhfE,ð•Â,¶,é,É,Í[]A[ftf@fCf<]f[]fjf...[[,@,ç[•Â,¶,é],ð'l'ð,·,é,@]A ‰E]]ãŠp,É, ,é]]m•Â,¶,é[]nf{f^f",ðfNfŠfbfN,µ,Ü,·]B

{button ,AL(`manage',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€-Ú</u>

#### <sup>\_\_\_</sup>flfŠfWfif<,ÌŠÇ—[] <sup>\_\_\_</sup>fJf^f[fO,μ,½ftf@fCf<,ÌfvfŒfrf...[[ fvfŒfrf...][,ÌŠg'å]A[k[¬]A‰ñ"]

fvfŒfrf...□[[fEfBf"fhfE,ð•\ަ,·,é,Æ□A□mfvfŒfrf...□[□n,Æ,¢,¤□V,µ,¢f□fjf... □[,ª□ì□¬,³,ê□A<u>fc□[f<fo</u>[],É[fvfŒfrf...□[]]f{f^f",ª'ljÁ,³,ê,Ü,·□BfvfŒfrf... □[fEfBf"fhfE,Ì'å,«,³,ÆŒü,«,ð•Ï□X,µ,½,è□Afrf...□[,ð□‰Šú•\ަ,ÉfŠfZfbfg,·,é,± ,Æ,ª,Å,«,Ü,·□BŒ»□Ý,ÌfY□[f€"{—¦,Í□AfXfe□[f^fXfo□[,̉E'¤,É•\ަ,³,ê,Ü,·□B

1.  $fvf@frf...[[fEfBf"fhfE,\delta'I'\delta,\mu,ÄfAfNfefBfu,É,\mu,Ü, ]B$ 

 $\label{eq:linear} $$ f^{-1}_{1,2}, f_{1,1}, f_$ 



- fvfŒfrf...□[,ðŠg'å/□k□¬,Ü,½,ĺ‰ñ"],·,é,É,ĺ□A^ȉº,Ì,¢,,\_,ê,©,ð□s,¢,Ü,·□B
   □E "K□Ø,ÈfvfŒfrf...□[fAfCfRf"(fY□[f€fAfEfg□AfY□[f€fCf"□A□¶,É90□<□A‰E,É90□<),ð'l'ð,·,é□B</li>
  - □E "K□Ø,È[fvfŒfrf...□[]f□fjf...
    □[,ÌflfvfVf‡f"([fY□[f€fAfEfg]□A[fY□[f€fCf"]□A[□¶,É90□<]□A[‰E,É90□<]),ð'l'ð,·,é□B
    </pre>
- fvfŒfrf...□[,ð□‰ŠúfTfCfY,ÉfŠfZfbfg,·,é,É,Í□AŽŸ,Ì,¢,,,ê,©,ð□s,¢,Ü,·□B
   □E [Œ³,É-ß,·]fAfCfRf",ðʻl'ð,µ,Ü,·□B
   □E fvfŒfrf...□[f□fjf...□[,©,ç[Œ³,É-ß,·],ðʻl'ð,µ,Ü,·□B
- 4. fvfŒfrf...□[,ðfAfvfŠfP□[fVf‡f"fEfBf"fhfE,É□‡,í,¹,é,É,Í□AŽŸ,Ì,¢, ,ê,©,ð□s,¢,Ü,·□B
  □E [f□fCf"fEfBf"fhfE,É□‡,í,¹,é]fAfCfRf",ð'l'ð,µ,Ü,·□B
  □E fvfŒfrf...□[fEfBf"fhfE,©,ç[f□fCf"fEfBf"fhfE,É□‡,í,¹,é],ð'l'ð,µ,Ü,·□B

{button ,AL(`manage',0,`',`')} <u>ŠÖ~A∏€–Ú</u>
### <sup>∭</sup>flfŠfWfif‹,ÌŠÇ—[] <sup>∭</sup>fJf^f[]fO,μ,½ftf@fCf‹,ÌfvfŒfrf...[[ fvfŒfrf...][fCf[][[fW,ÌfRfs][

fvfŒfrf...

# <sup>Ϣ</sup>flfŠfWfif‹,ÌŠÇ—[] <sup>Ϣ</sup>fJf^f[fO,μ,½ftf@fCf‹,ÌfvfŒfrf...[[ fvfŒfrf...][fCf[][fW,Ì^ó]ü

Cumulus,©,çfvfŒfrf...[[fCf]][fW,ð^ó]ü,·,é,É,Í]A^ȉº,ÌŽè]‡,É]],¢,Ü,·]B 1. [ftf@fCf<]f[]fjf...][,©,ç[^ó]üfvfŒfrf...][],ð'I'ð,µ,Ü,· [^ó]ü]f\_fCfAf]fOf{fbfNfX,ª•\ަ,³,ê,Ü,·]B 2. f\_fCfAf]fOf{fbfNfX,Å"K]Ø,È]Ý'è,ð]s,¢]A[OK],ðfNfŠfbfN,µ,Ü,·]B

{button ,AL(`manage',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€–Ú</u>

# 

[fŒfR□[fh]f□fjf...□[,©,ç[fGfNfXfvf□□[f‰],ðʻl'ð,·,é,Æ□AWindows,ÌfGfNfXfvf□□[f‰ ,ÉflfŠfWfif<ftf@fCf<,Ì•Ûʻ¶□ê□Š,ð•\ަ,Å,«,Ü,·□B

 $Windows, if GfNfXfvf [] [[f‰, Åftf@fCf<, ð, \cdot, i, â, "Á'è, \cdot, é, é, í[]A^è‰^, iŽè[]+, É[]], ¢, Ü, \cdot []B$ 

 $1. \underline{f \oplus f R [ [fhf Ef Bf"fhf E}, \hat{A} f \oplus f R [ [fh, \delta' l' \delta, \cdot, \acute{e}, © ] A [ \underline{f \oplus f R [ [fhf v f ] fp fef B} ] f Ef B f"fhf E, \delta \bullet \\check{Z}_{i}, \mu, \ddot{U}, \cdot ] B$ 

2. [f@fR[[fh]f]f];...[[, $^{\odot}$ ,c[fGfNfXfvf][[f‰],ð'l'ð,µ,Ü,·]B

{button ,AL(`manage',0,`',`')} <u>ŠÖ~A $\Box \in -\acute{U}$ </u>

# ∭flfŠfWfif<,ÌŠÇ—[] ftf@fCf<,ðfhfLf...f[]f"fg,ÉŠ",è•t,⁻,é

 $f \textcircled{C} f \Bbb{R}_{[fh, \delta_{fh}_{fm} fbfO&fhf_{fb}_{v}, \cdot, \acute{e}, \pm, \pounds, \mathring{A}_{A}, \grave{h}_{A}, \grave{h}_{A}, \grave{h}_{F}_{f}, \dot{h}_{f}, \dot{h}_{f}, \dot{h}_{f}_{f}, \dot{h}_{f}, \dot{h}_{f}_{f}, \dot{h}_{f}, \dot{h}_{f}_{f}, \dot{h}_{f}, \dot{h}_{f}_{f}, \dot{h}_{f}, \dot{h}_{f}_{f}, \dot{h}_{f}, \dot{h}_{h}, \dot{h}, \dot{h}_{h}, \dot{h}, \dot{h}_{h}, \dot{h}, \dot{h}, \dot{h}, \dot{h}_{h}, \dot{h}, 

 $1. - \acute{U}"I, if Afvf \check{S}fP [[fVf \ddagger f", a\check{Z} \grave{A} ]]s, a, e, \ddot{A}, e, \ddot{A} ]]A' i [] \hat{U}, if hf Lf ... f ]]f"fg, a\check{S}J, e, \ddot{A}, e, e, \pm, \mathcal{E}, \delta\check{S}m"F, \mu, \ddot{U}, \cdot ]]B$ 

2. Š",, $\dot{e}$ •t,<sup>-</sup>,, $\acute{e}$ ftf@fCf<, $\dot{f}$ ŒfR[[fh,ð'l'ð,µ,Ü,·[]B

3. f $\mathbb{C}fR$ [[fh,ðfNfŠfbfN, $\mu$ ,Ä]A-Ú"I,ÌfhfLf...f]f"fg,Éfhf‰fbfO, $\mu$ ,Ü,·]B

{button ,AL(`manage',0,`',`')} <u>ŠÖ~A $\Box \in -\acute{U}$ </u>

# ∭flfŠfWfif‹,ÌŠÇ—[] ftf@fCf‹,ÌfRfs[[

Cumulus,Å,Í[]A^ȉº,Ì•û–@,Åftf@fCf<,ð[]V,µ,¢[]ê[]Š,ÉfRfs[][,·,é,± ,Æ,ª,Å,«,Ü,·[]BCumulus,ÅfRfs[][,³,ê,éftf@fCf<,Í<u>f]fefSfŠŒŸ[]õ,Ì[]Ý'è</u>,ÅfRf"fgf[][[[f<,³,ê,Ü,·[]B

 $[] Ef \textcircled{C} f R [] [fh, \"{U}, \frac{1}{2}, \acute{l} f] f ef Sf \v{S}, \v{\delta} fff X f N fg f b f v, \acute{e} f h f ‰ f b f O, \mu, \"{A} [] A f t f @ f C f <, \grave{l} f R f s [] [, \eth [] \`{O} \neg, \cdot, \acute{e} [] B$ 

fJfefSfŠ,ðfffXfNfgfbfv,Éfhf‰fbfO,∙,é,Æ□AfJfefSfŠ-¼,Ӕ"⁻,¶– ¼'O,ÌftfHf<f\_,ª□ì□¬,³,ê□AŠÖ~A,∙,é,∙,×,Ä,ÌfŒfR□[fh,ÌflfŠfWfif<ftf@fCf<,ª,»,ÌftfHf<f\_,Ì′†,ÉfRfs□[,³,ê, Ü,·□B

 $\begin{array}{l} & \square E[f \textcircled{C} f R_{\square}[f h]f_{\square} fj f... \square[, @, c[f] f \v 5 f W fif <, \delta f R f s_{\square}[] \\ & , \delta'l' \delta, \mu, A \square A \underline{ftf @f Cf <, \delta_{\square} V, \mu, c_{\square} e_{\square} \v 5, \underline{f} R f s_{\square}[, \cdot, \underline{e}_{\square} B \square U \square \times, I \square A \square u[f] f \v 5 f W fif <, \delta f R f s_{\square}[], I \v 2 g \\ & p \square v, \delta \v 2 Q \square \pounds, \mu, A, ., \overset{3}{}_{4}, \overset{3}{}_{4}, e_{\square} B \end{array}$ 

 $\label{eq:constraint} \begin{array}{l} & \left[ E_{\underline{d}Zqf} \right] \\ & \left[ f_{\underline{d}Zqf} 

{button ,AL(`manage',0,`',`')}  $\underline{\check{S}O^{A} \square \underbrace{\in}-\acute{U}$ 

# IJflfŠfWfif‹,ÌŠÇ—[] IJftf@fCf‹,ÌfRfs[[ [flfŠfWfif‹,ðfRfs[[],ðŽg—p

 $[flfŠfWfif<,\deltafRfs[]],\deltaŽg=p,\mu,Ä[]Af]f^f[]fO,\mu,grac{1}{2}ftf@fCf<,\deltaf\underline{C}fR[][fhfEfBf"fhfE,Ü,/2,1[f\underline{C}fR[][fhfvf[]fpfefB]]fEfBf"fhfE,©,cfRfs[] [,`,é,±,A;ª,A,«,Ü,`]B$ 

ftf@fCf<,ðfRfs[[,·,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

- fJf^f□fOfEfBf"fhfE,ÅfŒfR□[fh,ð'l'ð,μ,Ü,·□B
- fŒfR□[fhf□fjf...□[,©,ç[flfŠfWfif、ðfRfs□[] ,ðfNfŠfbfN,µ,Ü,·□B[<u>fŒfR□[fhfvf□fpfefB</u>]f\_fCfAf□fOf{fbfNfX,Å□A ‰Ef}fEfXf{f^f",ðfNfŠfbfN,µ,Ä□Af|fbfvfAfbfvf□fjf...□[,©,ç[flfŠfWfif、ðfRfs□[],ð'l'ð,·,é,± ,Æ,à,Å,«,Ü,·□B

[flfŠfWfif<,ðfRfs[][]f\_fCfAf[]fOf{fbfNfX,ª•\ަ,³,ê,Ü,·[]B

3.  $[\bullet \hat{U}^{\prime}\P,\cdot,\acute{e}]\hat{e}]$   $ffB_{f}h,\acute{e}\hat{U}^{\prime}\P_{e},\acute{o}^{\dagger}u-\acute{l},\mu]A[\bullet \hat{U}^{\prime}\P]$  $,\acute{o}fNfSfbfN,\mu,\ddot{U},\cdot]B\bullet \ddot{I}X,\acute{o}Za,\acute{e}]A,\cdot,\acute{e},\acute{l}A[fLfff^{\prime}fZf^{\prime}],\acute{o}fNfSfbfN,\mu,\ddot{U},\cdot]B$ 

{button ,AL(`manage',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€-Ú</u>

# <sup>∭</sup>flfŠfWfif‹,ÌŠÇ—□ "dŽqf□□[f‹,ðŽg—p,μ,Äftf@fCf‹,ð'—□M,∙,é

,±,ÌfRf}f"fh,ðŽg,¤,Æ□ACumulus,©,çftf@fCf<,ð□A"dŽqf□□[f<,Ì"Y•tftf@fCf<,Æ,µ,Ä'—□M,·,é,± ,Æ,ª,Å,«,Ü,·□B"dŽqf□□[f<,ðŽg—p,µ,Äftf@fCf<,ð"z•z,·,é,É,Í□AMAPI (Messaging Application Programming Interface),ƌ݊·□«,Ì, ,é"dŽqf□□[f<fVfXfef€,ª•K—v,Å,·□B

ftf@fCf<,ð"dŽqf[][[f<,Å'—[]M,·,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

- [ftf@fCf<]f□fjf...□[,©,ç[flfŠfWfif<,ðf□□[f<,É"Y•t],ð'l'ð,µ,Ü,·□B</li>
  [fvf□ftf@fCf<,Ì'l'ð]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B</li>
- fVfXfef€,ÉfCf"fXfg□[f<,³,ê,½"dŽqf□□[f<fVfXfef€,ÉŠî,Ã,¢,½fvf□ftf@fCf<,ð'l'ð,μ,Ü,·□B</li>
- $4. \quad [V,\mu, \mbox{$!]} V,\mu, \mbox{$!]} (\hat{n}fT [[frfX, \mbox{$!]} (frfX, \mbox{$!]}$
- [fvf□ftf@fCf<,Ì'l'ð]f\_fCfAf□fOf{fbfNfX,ð•Â,¶,Ä•\ަ,³,ê,½fvf□ftf@fCf<,ð—LŒø,É,·,é,É,Í□A[OK] ,ðfNfŠfbfN,µ,Ü,·□B•Ï□X,ðŽæ,è□Á,·,É,Í□A[fLfff"fZf<],ðfNfŠfbfN,µ,Ü,·□B</li>

{button ,AL(`manage',0,`',`')}  $\underline{\check{SO}^{-}A\square \in -\acute{U}}$ 

# IJflfŠfWfif‹,ÌŠÇ—[] ftf@fCf‹,Ì^Ú"®

$$\begin{split} & \mathsf{Cumulus}, @, \varsigma, \mathsf{l}\mathsf{ftf}@\mathsf{f}\mathsf{C}\mathsf{f}^{(1)} @, \mathsf{I}[] A 2 \check{Z} \grave{e}[] \ddagger, \mathsf{A}[] \mathsf{s}, \mathsf{i}, \hat{e}, \ddot{U}, \cdot \Box \mathsf{B}, \ddot{U}, \underline{\Box} \mathsf{A}\mathsf{ft}\mathsf{f}@\mathsf{f}\mathsf{C}\mathsf{f}^{(3)} = \mathsf{V}, \mu, \varphi \Box \grave{e}[] \check{S}, \check{E}\mathsf{f}\mathsf{R}\mathsf{f}\mathsf{s}\Box[, 3, \hat{e}] \mathsf{A}\check{Z} \\ \ddot{Y}, \acute{E} \mathfrak{C}^{3}, \mathsf{I} \Box \grave{e}[] \check{S}, @, \varsigma, \mathsf{v}, \mathsf{I} \mathsf{f}\mathsf{t}\mathsf{f}@\mathsf{f}\mathsf{C}\mathsf{f}^{(3)} = \mathsf{I}(\square \infty, 3, \hat{e}, \ddot{U}, \cdot \Box \mathsf{B}^{(1)}) \\ & \mathsf{I}[] X, 3, \hat{e}, \ddot{U}, \cdot \Box \mathsf{B} \end{split}$$

fJf^f□fO,μ,½ftf@fCf<,ð^Ú"®,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

 $1. \ \underline{f \oplus f R} [\underline{f h f E f B f " f h f E}, \hat{A} f \oplus f R] [\underline{f h}, \delta' l' \delta, \cdot, \acute{e}, \odot ] A [\underline{f \oplus f R} ] \underline{f h f v f} ] f E f B f " f h f E, \delta \bullet \check{Z}_{i}, \mu, \ddot{U}, \cdot ] B$ 

[flfŠfWfif<,ð^Ú"®]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B

3. [•Û'¶,·,é[]ê[]Š]ftfB[][f<fh,ɕۑ¶]æ,ð"ü—ĺ,μ[]A[•Û'¶] ,ðfNfŠfbfN,μ,Ü,·[]B•Ï[]X,ðŽæ,è[]Á,·,É,Í[]A[fLfff"fZf<],ðfNfŠfbfN,μ,Ü,·[]B

4. 'l'ð,μ,½,·,×,Ä,Ìftf@fCf<,É′Î,μ,Ä□AŽè□‡3,ðŒJ,è•Ô,μ,Ü,·□B

 $\texttt{``A'`e,l} \texttt{\_} \texttt{e} \texttt{``S, \acute{E}ftf@fCf<, } \texttt{``A'' ``R', } \texttt{``A, if ``Sftf@fCf'' f X, } \texttt{``L, } \texttt{``A'' e, } \texttt{``A''$ 

{button ,AL(`manage',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€-Ú</u>

# ∭flfŠfWfif‹,ÌŠÇ—[] ftf@fCf‹,Ì[í[œ

 $[f \oplus f R \square [fh, \delta \square (\square \infty] f_f C f A f \square f O f \{ f b f N f X, Å [f | f Š f W f i f < f t f @ f C f < , à \square (\square \infty, \cdot, é) f | f v f V f \ddagger f'', \delta' | ' \delta, \cdot, é, \mathcal{E} \square A' | ' \delta, \mu, \frac{1}{2} f \oplus f R \square [f h, \mathcal{E} f | f Š f W f i f < f t f @ f C f < , h - \frac{1}{4} \bullet \hat{u}, \delta, \cdot, \hat{l}, \hat{a}, \square (\square \infty, \cdot, é, \pm, \mathcal{R}, \overset{a}{=}, A, «, \bigcup, \cdot \square B$ 

 $f \textcircled{E} f \textcircled{R}[[fh, \pounds ftf@fCf<, ]-\frac{1}{4} \bullet \hat{u}, \delta [] ([] @, \cdot, \acute{e}, \acute{e}, \acute{l}^{\hat{L}} \grave{e} ], \acute{e}, \acute{U}, \cdot [] B$ 

 $1. \underline{f \oplus f R} [\underline{f h f E f B f " f h f E}, A ] A ] (] \infty, \cdot, \acute{e} f \oplus f R ] [\underline{f h}, \delta' l' \delta, \mu, Ü, \cdot ] B$ 

 $2. [f \textcircled{G} f \\{G} f \textcircled{G} f \textcircled{G} f \textcircled{G} f \\{G} f \textcircled{G} f \textcircled{G} f \textcircled{G} f \\{G} f \textcircled{G} f \textcircled{G} f \\{G} f \textcircled{G} f \\{G} f \end{array}{G} f \textcircled{G} f \\{G} f \end{array}{G} f \textcircled{G} f \\{G} f \end{array}{G} [fŒfR□[fh,ð□í□œ]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B

3. [flfŠfWfif<,à□í□œ,·,é],ðʻl'ð,μ□A[□í□œ],ðfNfŠfbfN,μ,Ü,·□B•Ï□X,ðŽæ,è□Á,·,É,Í□A[fLfff"fZf<] ,ðfNfŠfbfN,μ,Ü,·□B

 $`l'\delta,\mu,\frac{1}{2}f \oplus f R [[fh, \mathcal{A} \square A, \gg, ] f \oplus f R [[fh, \acute{E}'\widehat{1} & \check{z}, \cdot, \acute{e} f I f \check{S} f W f i f < f t f @ f C f <, ] -\frac{1}{4} \bullet \hat{u}, \frac{9}{2} [i \square \infty, ^{3}, \hat{e}, \ddot{U}, \cdot \square B ]$ 

{button ,AL(`manage',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€-Ú</u>

# IJflfŠfWfif‹,ÌŠÇ—[] ftf@fCf‹,Ì•Ò[]W

ftf@fCf<,ð•Ò□W‰Â"\,Èfvf□fOf‰f€,ªfCf"fXfg□[f<,³,ê,Ä,¢,é□ê□‡,Í□ACumulus,ðŽg p,µ,Ä,»,Ìfvf□fOf‰f€,ð<N" ®,µ□Aftf@fCf<,ðŠJ,,±,Æ,ª,Å,«,Ü,·□B

fJf^f□fO,μ,½ftf@fCf<,ð'¼,Ìfvf□fOf‰f€,Å•Ò□W,·,é,É,Í□A^ȉ⁰,ÌŽè□‡,É□],¢,Ü,·□B

- 1.  $\underline{f \oplus f R \square [f h f E f B f "f h f E, Å f \oplus f R \square [f h, \delta' I' \delta, \mu, Ü, \cdot \square B]}$
- fŒfR□[fhf□fjf...□[,Ü,½,ĺ<u>fŒfR□[fhf|fbfvfAfbfvf□fjf...□[</u>,©,ç[flfŠfWfif<,ðŠJ,] ,ðfNfŠfbfN,µ,Ä□A[□ì□¬fvf□fOf‰f€],Ü,½,ĺ[,»,Ì'¼],ð'l'ð,µ,Ü,·□B

,»,Ìftf@fCf<,Ì□ì□¬fvf□fOf‰f€

,<sup>a</sup>«Ν<sup>··</sup>··®,μ□Aftf@fCf<,ðŠJ,«,Ü,·□B□m,»,Ì'¼□n,ð'l'ð,μ,½□ê□‡,Í□AfAfvfŠfP□[fVf‡f",ðŽw'è,·,éf\_fCfAf□f Ο,ªŒ»,ê,Ü,·□B

{button ,AL(`manage',0,`',`')} <u>ŠÖ~A $\Box \in -\acute{U}$ </u>

# <sup>(1</sup>⁄₄,Ìfvf□fOf‰f€,©,çftf@fCf‹,ð^ó□ü,∙,é

flfŠfWfif<,Ì^ó□ü,ª‰Â"\,Èfvf□fOf‰f€,ªfCf"fXfg□[f<,³,ê,Ä,¢,ê,Î□ACumulus,ðŽg,Á,Ä,»,Ìfvf□fOf‰f€ ,ð<N" ® ,μ□Aftf@fCf<,ð^ó□ü,·,é,±,Æ,ª,Å,«,Ü,·□B^ó□ü,ÌŠT—v,Í□u<u>□î•ñ,Ì^ó□ü</u>□v,ðŽQ□Æ,µ,Ä,-,¾,³,¢□B

fJf^f□fO,µ,½ftf@fCf<,ð'¼,Ìfvf□fOf‰f€,Å^ó□ü,·,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

- fŒfR□[fhf□fjf...□[,Ü,½,ĺ<u>fŒfR□[fhf|fbfvfAfbfvf□fjf...□[</u>,©,ç[flfŠfWfif<,ð^ó□ü] ,ðfNfŠfbfN,µ,Ä□A[□ì□¬fvf□fOf‰f€],Ü,½,ĺ[,»,Ì'¼],ð'l'ð,µ,Ü,·□B
   ,»,Ìftf@fCf<,É',·,éfvf□fOf‰f€,ª<N" ®,µ□Aftf@fCf<,ðŠJ,¢,Ä^ó□ü,µ,Ü,·□B</li>

{button ,AL(`manage',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

# Cumulus,ÌŽg—p—á

<u>fTf"fvf<fVfifŠfl,ÌŽg—p</u> <u>Cumulus Browser,ÌŽg—p</u> <u>Cumulus Internet Media Server,ÌŽg—p</u> <u>Cumulus,ÌŽ©"®‰»</u> <u>Vento,ÌŽg—p</u> <u>Cumulus"à,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p</u>

#### <sup>[]</sup>[] [][] Cumulus,ÌŽg—p—á [] fTf"fvf‹fVfifŠfl,ÌŽg—p

<u>fVfifŠfl 1: f□fS,Ì□³,μ,¢fo□[fWf‡f",ð'T,·</u>

<u>fVfifŠfI 2: fCf□□[fW,Ì″z•z</u>

<u>fVfifŠfI 3: f}f∢f`f□fffBfA□Efvf□fWfFfNfg,ÌŠÇ—</u>□

# ÜCumulus,ÌŽg—p—á ÜfTf"fvf‹fVfifŠfl,ÌŽg—p fVfifŠfl 1: f□fS,Ì□³,μ,¢fo□[fWf‡f",ð'T,∙

, ,é[]¬,³,È]L[]['ã—]"X,É<Î-±,·,éfOf‰ftfBfbfNfffUfCfi][,ª]A]Vfpf"ftfŒfbfg]ì[]¬,É, ,½,Á,Ä]AŒÚ< q,Ìf]fS,ð<},¢,ÅŒ©,Â,<sup>¬</sup>]o,·•K—v,É"—,ç,ê,Ä,¢,Ü,·]B

#### -â'è"\_

,»,Ìf□fS,Í□A•a‹C,ÅŒ‡‹Î,µ,Ä,¢ ,é'¼,ÌfffUfCfi□[,ª□Å‹ß□ì,è'¼,µ,½,à,Ì,Å,·□BŒ»□Ý,Ìfvf□fWfFfNfg,Í,Ù,Æ,ñ,Ç,ª‹¤'ÊftfHf‹f\_,ɕۑ¶,³,ê, Ä,¨,è□ACumulus,ðŽg,Á,Ä'Ç□Õ,³,ê,Ü,·□B

#### ‰ð**Œ**^∏ô

fOf‰ftfBfbfNfffUfCfi□[,Í□ACumulus,ðŽg,Á,Ä□AŽŸ,Ì,æ,¤,É∙K—v,Èf□fS,ðŽè'□,-ŒŸ□õ,µ□Af\_fEf"f□□[fh,µ,Ü,·□B

- 1. <u>Cumulus,ð<N"®,μ,Ä□AŒ»</u>□Ý,Ìfvf□fWfFfNfg,ÅŽg—p,³,ê,Ä,¢,éfJf^f□fO,ðŠJ,«,Ü,·□B
- ŽŸ,É□AfŒfR□[fh-¼□uXXŽĐf□fS□v,ÆfXfe□[f^fX□u□<sup>3</sup>"F□Ï,Ý□v,Å<u>•;□‡ŒŸ□õ</u>,ð□s,¢,Ü,·□B ŒŸ□õfNfGfŠ,Å"<sup>-^</sup>êf□fS,Ì3,Â,Ìfo□[fWf‡f",<sup>a</sup>Œ©,Â,©,è,Ü,·□B
- 3. fOf‰ftfBfbfNfffUfCfi $[[,I]Af@fR[[fhf]fjf...][,©,c[fvf@frf...][], \delta'I'\delta,\mu,Ä]AŠef@fR[[fh,\deltafvf@frf...][,\mu,Ü,·]B$
- 4. 2,Â,ÌfCf□□[fW,ª"<sup>-</sup>,¶,æ,¤,ÉŒ©,¦,½,Ì,Å□AfŒfR□[fhf□fjf...□[,©,ç[<u>fvf□fpfefB</u>],ð'I'ð,µ,Ä□AŠefŒfR□[fh,Ìfvf□fpfefB,ðŒŸ"¢,µ,Ü,·□B

5.

$$\label{eq:linearcond} \begin{split} & []uf \ensuremath{\mathbb{C}} fh \ensuremath{\mathbb{C}}$$

6. fOf‰ftfBfbfNfffUfCfi□[,ÌfŒfCfAfEfg,ÉfCf□□[fW,ð<u>fRfs□[</u>, $\mu$ ,Ä□A"Ç,Ý□ž,Ý,Ü,·□B {button ,AL(`scenario',0,`',`')} <u>ŠÖ~A□€-Ú</u>

# ÜCumulus,ÌŽg—p—á ÜfTf"fvf⊲fVfifŠfl,ÌŽg—p fVfifŠfl 2: fCf⊡[fW,Ì"z∙z

, ,é[□¬,³,ÈfffWf^f‹‰æ'œ[]^—[]‰ïŽÐ,ĺ[]AMacintosh,ÆWindowsf†[][fU,ÉfXfgfbfNŽÊ[]^,ÆfCf ‰fXfgfŒ[][fVf‡f",ð"Ì"",μ,Ä,¢,Ü,·[]BfCf[][[fW,ĺ[]A<sup>~</sup>\_—[]fe[][f]}ŽwŒü,ÌftfHf‹f\_[]\'¢,ðŽg,Á,ÄCD-ROM,Ōڋq,É"z•z,³,ê,Ü,·[]BŒ»[]Ý,·,×,Ä,ÌfCf[][[fW,ĺ[]A'½[]",Ì]AZfJ][[fgfŠfbfW,ɕۑ¶,³,ê,Ä,¢ ,Ü,·[]B

#### -â'è"\_

,±,̉ïŽÐ,Í□AŽÐ"à,Å,·,×,Ä,ÌfCf□□[fW,ð'Ç□Õ,·,é,½,ß,ÌŒø—¦"I,Å□A—LŒø,Å□AŽg,¢,â,·,¢•û-@,ð-Í□õ,µ,Ä,¢,Ü,·□B,Ü,½□AfCf□□[fW,ðŒÚ<q,É"z•z,·,é—LŒø,È•û-@,à'T,µ,Ä,¢,Ü,·□B

#### ‰ð**Œ**^<u>□</u>ô

‰ïŽÐ,Ì□§□ì•"'·,Í□ACumulus,ðŽg,Á,Ä□AŽŸ,Ì,æ,¤,ÉŽg—p‰Â"\ ,ÈfCf□□[fW,ÌfJf^f□fO,ð□ì□¬,μ,Ü,·□B

- $\Box E , \cdot, \times, \ddot{A}, \dot{I}fCf \Box \Box [fW, \delta \underline{f} \underline{f} \underline{f} \underline{f} 0, \mu, \ddot{U}, \cdot \Box B]$
- $\label{eq:linear} \begin{array}{ll} & \Box & flf \check{S} fW fif <, \check{I} \underline{f \boxplus f \blacksquare \square [fh \frac{1}{4}, \eth \square \` \square \lnot, \mu, \ddot{U}, \cdot \square B \end{array}$
- $[] E \bullet_i[]'', \hat{I}]fefSfŠ, \acute{E} \bullet^{\underline{a}} \flat, {}^{\underline{a}}, \hat{e}, \acute{e}fCf[][[fW, ]\underline{I}\underline{GfCf}\underline{S}\underline{f}\underline{A}\underline{f}\underline{X}, \eth[]] \neg, \mu, Ü, \cdot [] B$
- $\begin{array}{ll} & \label{eq:constraint} & \label{eq:constrain$

f[]fCf"f]]f^f[]fO,ªŠ®[]¬,·,é,Æ[]A[]§[]ì•"'·,Í<u>Cumulus Browser</u>,ðŽg,Á,Ä•Ê,Ì"z•z pf]]f^f[]fO,ð[]ì[]¬,µ,Ü,·[]B

{button ,AL(`scenario',0,`',`')} <u>ŠÖ~A $\Box$ €-Ú</u>

# <sup>III</sup>Cumulus,ÌŽg—p—á <sup>III</sup>fTf"fvf‹fVfifŠfl,ÌŽg—p fVfifŠfl 3: f}f‹f`f□fffBfAfvf□fWfFfNfg,ÌŠÇ—□

, ,é□¬,³,Èf}f<f`f□fffBfAŠÖ~A

ŵïŽÐ,ĺ□Ă<sup>²</sup>½□",ĨŒÚ<q,Ì,½,ß,É'ΰbŒ^f}fsf`f□fffBfAfvf□fWfFfNfg,ð□ì□¬,µ,Ä,¢ ,Ü,·□B,Ù,Æ,ñ,Ç,Ìfvf□fWfFfNfg,ÉfCf□□[fW□AfTfEf"fh□Afrfffl□A,¨,æ,Ñf}fsf`f□fffBfA□Efl□[fTfŠf"fOftf @fCf<□iDirector,Ü,½,ÍAuthorware□j,ªŠÜ,Ü,ê,Ä,¢,Ü,·□B,±,̉ïŽĐ,É,Í12-¼,Ìftf<f^fCf€□]<Æ^õ,ª,¨,è□A,»,ê,¼,ê•¡□",ÌŒ\_-ñŽÒ,ðŽg,Á,Ä,¢,Ü,·□B

<¤—Lftf@fCf<,ĺfvf□fWfFfNfg•Ê,É□AŽŸ,Éftf@fCf<Œ`Ž®•Ê,ÉftfHf<f\_,ɕۑ¶,³,ê,Ü,·□BfJf^f□fO,ĺ-^"Ó□AfŠf€□[fofuf<fJ□[fgfŠfbfW,ÉŽ©"®"I,ÉfofbfNfAfbfv,³,ê,Ü,·□BŠ®□¬,μ,½fvf□fWfFfNfg,ĺCD-ROM,ɕۊÇ,³,ê,Ü,·□B

#### -â'è"\_

f}f\f\f\ffBfAfvf[]fWfFfNfg,ÉŽg—p,<sup>3</sup>,ê,éftf@fCf<[]",<sup>a</sup>'½,]Aftf@fCf<Œ`Ž®,<sup>a</sup>'½Šò,É,í,½,é,½,ß[A ‰ïŽÐ,Í,Æ,«,Éfo[[fWf‡f"ŠÇ—[],Ì-â'è,É'~<ö,·,é,±,Æ,<sup>a</sup>, ,è]A[]d—vftf@fCf<,̕ۊÇ[]ê[]Š,ðŒë,Ü,é,±,Æ,à],È,,, ,è,Ü,<sup>1</sup>,ñ[]B,<sup>3</sup>,ç,É[ACD-ROM,ÉfA[][f]fCfu,<sup>3</sup>,ê,½fvf[]fWfFfNfg,É,·,®,ÉfAfNfZfX,µ,æ,¤,Æ,µ,Ä,à]A"ñ[](,ÉŽŽŠÔ,<sup>a</sup>,©,©,é,±,Æ,<sup>a</sup>, ,è,Ü,·[]B‰ïŽÐ,ÍfIfŠfWfif<ftf@fCf<,ðŒø—¦"I,ÉŠÇ—[],·,é•û-@,ð-Í[]õ,µ,Ä,¢,Ü,·]]B

#### ‰ð**Œ**^∏ô

fvf[]fWfFfNfgŠÇ—[]Žå"C,ĺ[]A2,Â,ÌfJf^f[]fO,ð[]ì[]¬,µ,Ü,·[]B1,Â,ĺŒ»[]Ý,Ìfvf[]fWfFfNfg p,Å[]A,à,¤1,Â,劮[]¬fvf[]fWfFfNfg—p,Å,·[]BŒ»[]Ý,Ìfvf[]fWfFfNfg pfJf^f[]fO,É,ĺ[]AfXf^fbft,ªŽŸ,Ìf^fXfN,ðŽÀ[]s,µ,Ü,·[]B

- []E , · , × ,Ä,ÌfJf^f[]fO[]Ý'è,ð[]\[]¬[]i[]wCumulus Network Desktop/Desktop PLUS<¤'Êf}fjf... fAf<[]x,ðŽQ[]Æ[]j</p>
- $\Box E , \cdot, \times, \ddot{A}, \dot{I}fCf \Box \Box [fW, \mathcal{E}, *, \dot{I}'\frac{1}{4}, \dot{I}fvf \Box fWfFfNfg v'f, \dot{\delta}\underline{f}]\underline{f}^{f} \underline{D}f O$
- $\Box E \quad \textcircled{A}[X, \hat{I}fCf][[fW, \hat{I}-\hat{a}'\hat{e}, \hat{E}'][\hat{Z}B, \hat{\sigma}\bullett, \bar{\gamma}, \hat{e}, \frac{1}{2}, B, \hat{E}\underline{fm}[[fg, \underline{\delta}'\underline{C} & \underline{A}]] \\ i \check{S}Y"-, \cdot, \hat{e}[]\hat{e}[] \\ \ddagger \Box i$

Š®□¬fvf⊡fWfFfNfg—pfJf^f⊡fO,Å,ĺ□Afvf⊡fWfFfNfgŠÇ— □Žå"C,ª,·,×,Ä,ÌfA□[fJfCfu,³,ê,½fvf⊡fWfFfNfg,Ì"à—e,ðŒŸ□õ,µ,Ä□AfJf^f⊡fO,µ,Ü,·□B,Ü,½□A– â'è"\_,â□Ú□×□î•ñ,ð□AŠY"-,·,éfŒfR□[fh,Ìfm□[fg,É<L□q,µ,Ü,·□B

{button ,AL(`scenario',0,`',`')} <u>ŠÖ~A $\Box \in -U</u>$ </u>

## Cumulus,ÌŽg—p—á Cumulus Browser,ÌŽg—p

Cumulus Browser,Í[]ADesktop PLUSft[][fU,Ì,ÝŽg—p,Å,«,é-³—¿f\ftfg,Å,·]BCumulus Browser,ðŽg —p,μ,Ä[]ACumulus,ÌfJf\_f][fO,ðCD-ROM,È,Ç,ÌfIftf

‰fĊf"□Ef□fffBfA□i<sup>·1</sup>¼,É□ĂSyQuest□AZip□ÅJaz□AMOfffBfXfN,È,Ç□j,É"-□s,Å,«,Ü,·□BCumulus,Ì□³<Kft□[fU,Í□AfvfŒfCf"fXfg□[f<□ï,Ý,ÌfAfvfŠfP□[fVf‡f",Æ,μ,Ä□A, ,é,¢ ,ÍCumulus CD-ROM,É"à',³,ê,Ä,¢,éfCf"fXfg□[f‰,ðŽg—p,μ,ÄCumulus Browser,ð"z•z,Å,«,Ü,·□B

Cumulus Browser,Í[]A'Ê[]í,ÌCumulus Desktop PLUS,Ì'S‹@"\,ð"õ,¦,Ä,¢,Ü,·[]B,½,¾,µ[]A^ȉº,Ì áŠO,ª, ,è,Ü,·[]B

 $[]E []i[]\neg,\cdot,\acute{e}[]V (Kf]f^f[]fO,\acute{e},\acute{l}[]A[]Å[],50 @],Ü,Å,\mu, @f@fR[][fh,ðf]f^f[]fO,Å,«,È,¢[]B$ 

$$\label{eq:constraint} \begin{split} & \Box E \ \hat{e}^*x, \acute{E}2, \hat{A}, if Jf \ f \Box f O, \mu, @ \check{S}J, , \pm, \mathcal{A}, \overset{a}{,} \dot{A}, <, \dot{E}, & \Box B \end{split}$$

Cumulus Browser,ðŽg,Á,½fJf^f□fO"z•z,Ì□Ú□×,Í□w<u>Cumulusft□[fefBfŠfefBf}fjf...</u> <u>fAf<</u>]x,ðŽQ□Æ,µ,Ä,,¾,³,¢□B

{button ,AL(`distribution',0,`',`')} <u>ŠÖ<sup>~</sup>A□€-Ú</u>

### Cumulus, ÌŽg—p—á Cumulus Internet Media Server, ÌŽg—p

 $\begin{array}{l} Cumulus Internet Media Server, & \label{eq:linear_$ 

ŽŸ,Ì,æ,¤,È"Á'·,ª, ,è,Ü,·∏B

Cumulus Internet Media Server,Í□AfzfbfgfŠf"fN,<sup>3</sup>,ê,<sup>1</sup>⁄2fJf^f□fO,ÌŠK'wfJfefSfŠfŠfXfg,ðHTML,Å□',«□o,µ,Ü,·□BfŠfXfg,©,ç□€– Ú,ð'l'ð,·,é,±

,Æ,É,æ,Á,Ä□AfIfŠfWfif<,ÌfJf^f□fOŒŸ□õ,ªŽÀ□s,³,ê□Af†□[fU,ĺfIfŠfWfif<,ðŒŸ□õ,µ,Ä□Af\_fEf"f□□[fh,·, é,±,Æ,ª,Å,«,Ü,·□B

Cumulus Internet Media Server,Í□AŽŸ,Ì,æ,¤,È—<sup>~</sup>"\_,ª, ,è,Ü,·□B

- □E Cumulus,Å□ì□¬,µ,½fJf^f□fO,ð□Afvf‰fbfgftfH□[f€,âfuf‰fEfU,Ìf^fCfv□i á□FMacOS□AWindows□AUNIX□j,ð-â,í,, œŸ□õ,Å,«,é□B
- □E fTf"fvf<,ÌHTMLfef"fvfŒ□[fg,ª•t'®□B
- □E •¡□",ÌŒŸ□õ,©,ç'l'ð,³,ê,½ff□[f^,ð1f-□Š,É□W,ß,½,è□A4-Sight ISDN Manager,ðŽgp,µ,Äftf@fCf<,ð"]'-,Å,«,é□B</p>
- □E CumulusfT□[fo,Ì[fgf‰fXfefB□Ý'è],É,æ,è□Aft□[fU,ÌfAfNfZfXŒ,âf\_fEf"f□□[fh"\ ĺ,ðŽw'è,Å,«,é□B
- $\label{eq:constraint} \begin{array}{c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & & & \\ & & & & &$
- []E CGIfAfvfŠfP[[fVf‡f",ðŽÀ[]s,·,é—\-ñœê,ð'è<`,·,é,± ,Æ,Å[]Aft[[fU[]EfCf"f^ftfF[[fX,ðf]fXf^f}fCfY,Å,«,é[]B

Cumulus Internet Media Server,Ì□Ý'è,Ì□Ú□×,Í□w<u>Cumulusft□[fefBfŠfefBf}fjf…</u> <u>fAf</u>≤□x,ðŽQ□Æ,µ,Ä,,¾,³,¢□B

{button ,AL(`distribution',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€–Ú</u>

#### <sup>∭</sup>Cumulus,ÌŽg—p—á Cumulus,ÌŽ©"®‰»

Cumulus,ÌDesktop PLUS"Å,Å,ĺ[]Α[]ì‹Æ,Ì,Ù,Æ,ñ,Ç,ð^ȉº,Ì,æ,¤,ÈOLE'Ήžfvf[]fOf ‰f~f"fOfc[[[f‹,ðŽg—p,µ,ÄŽ©"®‰»,·,é,±,Æ,ª,Å,«,Ü,·[]B

- □E Microsoft Visual Basic
- □E Microsoft Visual C++
- □E Microsoft Visual J++
- E Borland Delphi
- □E PowerSoft PowerBuilder

ffftfHf‹fg,Å,ÌfCf"fXfg□[f‹,É,Í□AVisual Basic,ðŽg—p,μ,½Ž©"® ‰»fAfvfŠfP□[fVf‡f",ªŠÜ,Ü,ê,Ü,·□B,³,ç,É"Á‰»,μ,½<u>fXfNfŠfvfg</u>,Í□AMore ScriptsftfHf‹f\_,ÉŽû<sup>~</sup>^,³,ê,Ä,¢,Ü,·□B

Cumulus,ðf][][fNftf][][,É,Ç,Ì'ö"x—LŒø,É"[][‡,Å,«,é,©,Í[]A'Ê[]ÍŽg p,·,éfAfvfŠfP[[fVf‡f",ªOLEfI[[fgf[]][fVf‡f",É[]€<',µ,Ä,¢,é,©,Ç,¤ ,©,ÅŒ^,Ü,è,Ü,·[]BCumulusfI[[fgf[][[fVf‡f",É,Â,¢,Ä,Ì[]Å[]V[]î•ñ,Í[]A"-ŽÐ,ÌfEfFfufTfCfg,ð,²——,-,¾,³,¢(http//:www.crs.co.jp)]]B

Cumulus,ÍOPI,ƌ݊·□«,ª, ,è□ALuminous Color Central□ANineBits PrintDesk□A4-Sight OPI□AHelios EtherShare,È,Ç,ÌOPIŒÝŠ·,Ì□»•i,©,çfpfX-¼□î•ñ,ð"Ç,Ý,Æ,è□A□,‰ð'œ"x,Æ'á ‰ð'œ"x,Ì—¼•û,Ìftf@fCf<□î•ñ,ðŠÇ—□,·,é,±,Æ,ª,Å,«,Ü,·□B

fNf‰fCfAf"fg,Í□A'á‰ð'œ"x,Ìftf@fCf<,ªfJf^f□fO,³,ê,½Cumulus,©,ç□AAdobe PageMaker,È,Ç,ÌfŒfCfAfEfgfAfvfŠfP□[fVf‡f",É'á‰ð'œ"x,Ìftf@fCf<,ðŠ,,,è•t,¯,é,±,,Æ,ª,Å,«,Ü,,·ª□A"¯Žž,ÉfIfŠfWfif<ftf@fCf<,i•Ò□W,Ì□Û,É,Í□,‰ð'œ"xftf@fCf<,ðŽ©"®"I,É'T,µ□AŽw'è,µ,½fAfvfŠfP□[fVf‡f",ÅŠJ,,±,Æ,ª,Å,«,Ü,·□B

Cumulus,Í□AScitex APR,È,Ç,Ì□AEPSFftf@fCf‹,ð'á‰ð'œ"xftf@fCf‹,Æ,µ,ÄŽg—p,·,é'½,-,ÌOPIfVfXfef€,Æ,àŒÝŠ·□«,ª, ,è,Ü,·□BfŒfCfAfEfgftf@fCf‹,Í'Ê□í'Ê,è,É□^— □,³,ê,Ü,·,ª□A□,‰ð'œ"x,Ìftf@fCf‹,Ö,ÌfpfX,ªŽ©"®"I,É"FŽ<sup>-</sup>,³,ê,È,¢□ê□‡,ª, ,è,Ü,·□B

# <sup>∭</sup>Cumulus,ÌŽg—p—á Vento,ÌŽg—p

Cumulus Desktop PLUS,É,Í□AVento,Æ,¢,¤ftfHf‹f\_ŠÄŽ‹ft□[fefBfŠfefB,ªŠÜ,Ü,ê,Ä,¢ ,Ü,·□BVento,Í□Af□□[fJf‹,ÌWindows NTftf@fCf‹fT□[fof{fŠf... □[f€□ã,É, ,éftfHf‹f\_,Ü,½,Í,»,ÌfTfuftfHf‹f\_ŠK'w,ðŠÄŽ‹,µ,Ü,·□B,»,ÌftfHf‹f\_"à,É,¨,¢,Ä□Aftf@fCf‹,ª'Ç ‰Á□A•Ï□X□A□í□œ,³,ê,½□ê□‡,Í□AVento,ĺft□[fU,ª'I'ð,µ,½Ž©"® ‰»fAfvfŠfP□[fVf‡f",ð<N"®,µ,Ü,·□B

Vento,É,Í[]ACumulus,ÌfJf^f[]fO,ðŽ©"®"I,É[]X[]V,·,éVisual Basic 5.0,Ìfvf[]fOf‰f€,ª•t'®,µ,Ä,¢ ,Ü,·[]Bf\[][fXfR[][fh,ª•t'®,µ,Ä,¢ ,é,½,ß[]A<u>fXfNfŠfvfg</u>,ð]]C[]<sup>3</sup>,µ,Ä[]A'¼,Ì[]ì<Æ,ðŽÀ[]s,µ,½,è[]AOLE,É,æ,鎩"®‰»,É'Î ‰ž,·,é'¼,ÌfAfvfŠfP[[fVf‡f",ð]§Œä,µ,½,è,Å,«,Ü,·[]B

## Cumulus, ÌŽg—p—á Cumulus, ÉŠÜ, Ü, ê, 鎩 " ® ‰»fXfNfŠfvfg, ÌŽg—p

□E □mScript□nftfHf<f\_,É,Í□A^ê″Ê"I,È—p"r,Ìf,fWf…□[f<,ªŠÜ,Ü,ê,Ä,¢,Ü,·□B

□E More ScriptsftfHf‹f\_,É,Í□A,æ,è"Á‰»,μ,½—p"r,Ìf,fWf…□[f‹,ªŠÜ,Ü,ê,Ä,¢,Ü,·□B

Cumulus,ÌŽ©"®‰»,ÉŠÖ,·,é[]Å[]V[]î•ñ,Í[]ACantoŽĐ,ÌWebfTfCfg(www.canto-software.com) ,ðŽQ[]Æ,μ,Ä,,¾,3,¢[]B

,¢, \_,ê,ÌftfHf‹f\_,ÉŠÜ,Ü,ê,éfXfNfŠfvfg,à∏A□mScript□nftfHf‹f\_,Éfhf‰fbfO,·,é,± ,Æ,Å□A[fXfNfŠfvfg]f□fjf...□[,©,çŽÀ□s,Å,«,é,æ,¤,É,È,è,Ü,·□B□mScript□nftfHf‹f\_,É'Ç ‰Á,µ,½fXfNfŠfvfg,Í□AŽŸ,ÉCumulusfAfvfŠfP□[fVf‡f",ð‹N"®,µ,½,Æ,«,ÉŽg—p‰Â"\,É,È,è,Ü,·□B

Cumulus,ÉŠÜ,Ü,ê,éf,fWf…□[f<,Í□AŽŸ,ÌfJfefSfŠ,É•ª—Þ,³,ê,Ü,·□B

<u>fJf^f□fO,ÌŽ©"®‰»</u>

<u>fŒfR□[fh,Æf]fefSfŠ</u>

ftf@fCf<[]EfŠftf@fŒf"fX,ÌŠÇ—[]

DCSftf@fCf<,ÌŠÇ—□

<u>ŒŸ∏õ</u>

<u>"Ç,Ý□ž,Ý/□',«□o,μ</u>

<u>'¼,ÌfAfvfŠfP□[fVf‡f",Æ,Ì~AŒg</u>

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A□€–Ú</u>

### ÜCumulus,ÌŽg—p—á ÜCumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p fJf^f□fO,ÌŽ©"®‰»

[fzfbfgftfHf‹f\_],ĺ[A1,Â,ÌftfHf‹f\_,ðŠÄŽ‹,·,é<u>fXfNfŠfvfg</u>,Å,·[]BftfHf‹f\_,É'Ç ‰Á,³,ê,½[]V,µ,¢ftf@fCf‹,ĺ[]ACumulus,ÌfAfNfefBfu,ÈfJf^f[]fO,É'ljÁ,³,ê,Ü,·[]B

 $[fzfbfgftfHf < f_], \delta \check{Z}g - p, \cdot, \acute{e}, \acute{E}, \acute{I} \square A^{\grave{E}} \&^{0}, \grave{I}\check{Z}\grave{e} \square +, \acute{E} \square, ¢, \ddot{U}, \cdot \square B$ 

1. fzfbfgftfHf<f\_fAfvfŠfP[[fVf‡f",ð<N"  $\ensuremath{\mathbb{R}}$ ,µ,ÄftfHf<f\_,ð'l'ð,·,é,©[]AftfHf<f\_,ð[fzfbfgftfHf<f\_],ÌfAfCfRf",Éfhf‰fbfO&fhf[]fbfv,µ,Ü,·]]B

2. ftfHf<f\_,Ì"à—e,ð′²,×,éŠÔŠu,ð•b′P^Ê,Å"ü—ĺ,μ,Ü,·□B

 $\begin{array}{l} f]f^f[]fO,\delta1,\hat{A},\ddot{U},\frac{1}{2},\dot{I}\bullet_{i}[]^{\prime\prime},\dot{I}ftfHf<f_{,}\dot{I}^{\prime}\dot{a}-e,\dot{E}[]\pm,i,\frac{1}{A}[]X[]V,\cdot,\dot{e}[]\hat{e}[]\pm,\dot{I}[]A\underline{Vento},\delta\check{Z}g-p,\cdot,\acute{e},\varkappa,\varkappa,\ddot{S}@,\beta,\mu,\ddot{U},\cdot([]uVento,\dot{I}\check{Z}g-p]]v\check{Z}Q[]Æ) \end{array}$ 

{button ,AL(`automation',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€-Ú</u>

## ÜCumulus,ÌŽg—p—á ÜCumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p fŒfR□[fh,ÆfJfefSfŠ

 $\begin{array}{l} Cumulus, \not {E}, & i \square A^{\prime} & i \square^{\prime}, & i f \textcircled{G} f R \square [fh, & S \end{matrix}{C} & \square, \cdot, & e, & i \end{pmatrix}, & f, & f \end{pmatrix} \\ & (h, h) & (h, h) & ($ 

 $\begin{array}{l} f\}f_{\checkmark}f^{}_{\uparrow}ffefSfS''o^{}_{\circ} \\ fXfe_{}[f^{}_{f}X,\delta^{}eS^{}_{\pm}"o^{}_{\circ} \\ \Box d_{\downarrow,\mu,\ddot{A}, \downarrow, \acute{e}f]fefSfS,\delta'T_{,\cdot} \\ \hline \Box & \Box & \Box & \Box \\ \hline \underline{\Box} & \Box & \Box & \Box \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \hline \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} & \underline{\Box} \\ \underline{\Box} & \underline{\Box}$ 

### ÜCumulus,ÉŠÜ,Ü,ê,鎩"®‱»fXfNfŠfvfg,ÌŽg—p ÜfŒfR□[fh,ÆfJfefSfŠ f}f<f`fJfefSfГo<sup>~</sup>^

 $\label{eq:mf} $$ f^f_f_f_f_f_f_f_0^*_0^n, $$ d_p, $$, $$ d_p, $$, $$ d_p, $$$ 

1. fJfefSfŠ,É"o<sup>~</sup>^,·,éfŒfR[[fh,ð'l'ð, $\mu$ ,Ü,·[]B

2. fJfefSfŠ,ð'l'ð,μ,Ü,∙∏B

3. [fXfNfŠfvfg]f $\Box$ fjf... $\Box$ [, $\odot$ ,c[f}fff]fefSfГo~^], $\delta$ 'l' $\delta$ , $\mu$ , $\ddot{U}$ , $\Box$ B

{button ,AL(`automation',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€–Ú</u>

#### <sup>I</sup>Cumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p <sup>I</sup>fŒfR□[fh,ÆfJfefSfŠ fXfe□[f^fX,ð^ꊇ"o<sup>~</sup>^

[]mfXfe[][f^fX,ð^ꊇ"o<sup>~</sup>^[]n,ĺ[]A"<sup>-</sup>^ê,ÌfXfe[][f^fX,ð'l'ð,μ,½•i[]",ÌfŒfR[][fh,É"o<sup>~</sup>^,μ,Ü,·[]B,± ,ÌfAfvfŠfP[][fVf‡f",ðŽÀ[]s,∙,é'O,É[]A<u>fŒfR[][fhfEfBf"fhfE</u>,ÅfŒfR[][fh,ð'l'ð,μ,Ä,,¾,³,¢[]B

 $[mfXfe][f^fX,\delta^{e}Š^{+}"o^{-}]n,\delta Zg-p,\cdot,e,E,I]A^{E}.$ 

 $1. fXfe [[f^fX, \delta"o^{^}, \cdot, \acute{e}f \oplus fR ][fh, \delta f \oplus fR ][fhfEfBf"fhfE, Å'l' \delta, \mu, \ddot{U}, \cdot ]]B$ 

2. [fXfNfŠfvfg]f $\Box$ fjf... $\Box$ [,@,ç[fXfe $\Box$ [f^fX,ð^ꊇ"o^^],ð'I'ð,µ,Ü, $\Box$ B

3. f $\mathbb{E}$ fR $[fh, \acute{E}'o^{,,,\acute{e}fXfe}[f^{fX}, \eth"\ddot{u}-\acute{l}, \mu, \ddot{U}, \cdot]B$ 

fXfe□[f^fX,ð'l'ð,µ,â,·,¢,æ,¤,É□AŒ»□Ý,ÌfXfe□[f^fXfŠfXfg,Ì^ê•",<sup>a</sup>"ü—ĺftfB□[f‹fh,É•\ ަ,³,ê,Ü,·□BfXfe□[f^fX,Í□AfXfe□[f^fXfŠfXfg,É"o<sup>~</sup>^,µ,½,à,Ì,Æ"<sup>-</sup>,¶,à,Ì,ð"ü—ĺ,µ,Ä,,¾,³,¢□B {button ,AL(`automation',0,`',`')} <u>ŠÖ<sup>~</sup>A□€-Ú</u>

### 

[]m[]d∙¡,μ,Ä,¢

,éfJfefSfŠ,ð′T,·[n,l[]AfAfNfefBfu,ÈfJf^f⊡fO′†,l]d•i,·,éfJfefSfŠ,ðŒŸ[]o,µ,Ü,·[]B[]d•i,·,éfJfefSfŠ,ªŒŸ []o,³,ê,½[]ê[]‡,l[]A[]m[]d•i,µ,Ä,¢,éfJfefSfŠ,ð′T,·[]n,ĺ,·,×,Ä,ljÆfR[][fh,ð[]Å[]‰ ,ljJfefSfŠ,É[]Ä"o~^,µ,Ü,·[]BŽŸ,É[]A[]d•i,·,éftfHf‹f\_,Å, ,é,±,Æ,ª,í,©,é,æ,¤ ,É[]A,»,ê^ÈŠO,l,·,×,Ä,lfJfefSfŠ,l-¼'O,ð•Ï[]X,µ[]A[]í[]œ,·,é,©,Ç,¤,©,ðf†[][fU,ÉŠm"F,µ,Ü,·[]B

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A□€–Ú</u>

# <sup></sup><sup>∭</sup>Cumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p <sup>∭</sup>fŒfR□[fh,ÆfJfefSfŠ Œ»□Ý"ú•t,ÅfJfefSfŠ,ð'T,·

$$\label{eq:messaward} \begin{split} & [m \times \mathbb{I}^{\prime} ( \bullet t, \mathbb{A} f] fefSf \check{S}, \check{\sigma}' T, \cdot [n, I] A \times \mathbb{I}^{\prime} ( \bullet t, \check{\sigma} - \frac{1}{4} O, \acute{E}, \mu, \frac{1}{2} [V, \mu, \notin f] fefSf \check{S}, \check{\sigma} [] = \neg, \mu, \ddot{U}, \cdot [B] \\ & \{ button, AL(`automation', 0, `', `') \} \quad \underline{\check{S} O^{\sim} A \square \pounds - \acute{U}} \end{split}$$

#### ÜCumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p ÜfŒfR□[fh,ÆfJfefSfŠ fŒfR□[fh,¨,æ,ÑOPIftf@fCf‹,ð□í□œ

[]mfŒfR[][fh,¨,æ,ÑOPlftf@fCf<,ð[]í[]œ[]n,ĺ[]A'l'ð,μ,½,·,×,Ä,ÌfŒfR[][fh,¨,æ,Ñ,»,ê,É'Î ‰ž,·,é[],‰ð'œ"xftf@fCf<,ÆOPlfŒfCfAfEfgftf@fCf<,ð[]í[]œ,μ,Ü,·[]BCumulus,ĺ[]AŠg'£Žq,ÆfTfuftf Hf<f\_,Ì[]ê[]Š,Ì,Ç,¿,ç,ðŽg—p,μ,ÄOPlftf@fCf<,ð[]Ä"FŽ⁻,·,é,©,ðf†[][fU,ÉŠm"F,μ,Ü,·[]B

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A□€-Ú</u>

# ÜCumulus,ÌŽg—p—á Ü Cumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p ftf@fCf<fŠftf@fŒf"fX,ÌŠÇ—[]

ftfHf<f\_^Ú"®Œã,ÌfŠftf@fŒf"fX,ðŠm"F

<u>ftf@fCf<fŠftf@fŒf"fX,ÌŽw'襕ï□X</u>

<u>ftfHf<f\_,Ì^Ú"®</u>

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A□€–Ú</u>

#### ©Cumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p ©ftf@fCf‹fŠftf@fŒf"fX,ÌŠÇ—□ ftfHf‹f\_^Ú"®Œã,ÌfŠftf@fŒf"fX,ðŠm"F

 $[ftfHf \cdot f_^Ú" @ Ea, lf Šftf@fEf"fX, ð Šm"F] , [IA \cdot \cdot \cdot \cdot \cdot \cdot A, lf EfR_[fh, lftf@fEf \cdot f S, ftf@fEf"fX, ð Šm"F] , [IA \cdot \cdot \cdot \cdot \cdot \cdot \cdot A, lf EfR_[fh, lftf@fEf \cdot f S, ftf@fEf"fX, ð [IA \cdot \cdot \cdot \cdot \cdot \cdot A, lf EfR_[fh, lftf@fEf \cdot f S, ftf@fEf"fX, ð [IA \cdot \cdot \cdot \cdot \cdot \cdot A, lf EfR_[fh, lftf@fEf \cdot f S, ftf@fEf"fX, ð [IA \cdot \cdot \cdot \cdot \cdot A, lf EfR_[fh, f S, ftf@fEf"fX, ð [IA \cdot \cdot \cdot \cdot \cdot A, lf EfR_[fh, f S, ftf@fEf"fX, ð [IA \cdot \cdot \cdot \cdot A, lf EfR_[fh, f S, ftf@fEf"fX, ð [IA \cdot \cdot \cdot A, lf EfR_[fh, f]] , [IA SÖEW, \cdot , é, \cdot , \times , A, lf EfR_[fh, ð EY_[0, \mu]A EA, tftfHf \cdot f_[if]f^f]fO, lf EfR_[fh, f, , é \cdot Û' ] [If h, ð EY_[0, \mu]A EA, tftfHf \cdot f_[if]f^f]fO, lf EfR_[fh, f, , é \cdot Û' ] [If h, ð EY_[0, \mu]A EA, tftfHf \cdot f_[if]f^f]fO, lf EfR_[fh, f, , é \cdot Û' ] [If h, ð EY_[0, \mu]A EA, tftfHf \cdot f_[if]f^f]fO, lf EfR_[fh, f, , é \cdot Û' ] [If h, ð EY_[0, \mu]A EA, tftfHf \cdot f_[if]f^f]fO, lf EfR_[fh, f, , é \cdot Û' ] [If h, ð EY_[0, \mu]A EA, tftfHf \cdot f_[if]f^f]fO, lf EfR_[fh, f, , é \cdot Û' ] [If h, f] = lftfHf \cdot f_[fh, f] = lftfHf \cdot f_{f} = lftfHf \cdot f_{f} = lftfHf \cdot f_{f} = lftfHf \cdot f_{f} = lftfHf \cdot f] = lft$ 

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A∏€-Ú</u>

## <sup>I</sup>Cumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p <sup>II</sup>ftf@fCf<fŠftf@fŒf"fX,ÌŠÇ—[ fŠftf@fŒf"fX,ðŽw'è[E∙Ï[X,∙,é

 $\begin{array}{l} [f\check{S}ftf@f{C}f''fX, \delta\check{Z}w'e]E\bullet \ddot{I}]X,\cdot, e \\ , \dot{I}]A'1'\delta, \mu, \frac{1}{2}f{C}fR][fh, \dot{I}]\underline{ft}@fCf_{\underline{f}}\underline{S}ftf@f{C}f''fX, \delta]V, \mu, e \\ ftf@fCf_{\underline{f}}\underline{C}f_{\underline{f}}\underline{S}ft]= fh, \dot{I}]\underline{ft}@fCf_{\underline{f}}\underline{S}ftf@f{C}f''fX, \delta]V, \mu, e \\ ftf@fCf_{\underline{f}}\underline{C}f_{\underline{f}}\underline{S}ft]= fh, \dot{I}]\underline{f}\underline{S}ftf@f{C}f''fX, \delta \\ ff_{\underline{f}}\underline{S}][\partial_{\underline{f}}]\underline{C}f_{\underline{f}}\underline{S}ft]= fh, \dot{I}]\underline{f}\underline{S}ftf@f{C}f''fX, \delta \\ ff_{\underline{f}}\underline{S}][\partial_{\underline{f}}]\underline{C}f_{\underline{f}}\underline{S}ft]= fh, \dot{I}]\underline{f}\underline{S}ftf@f{C}f''fX, \delta \\ ff_{\underline{f}}\underline{S}][\partial_{\underline{f}}]\underline{C}f_{\underline{f}}\underline{S}ft]= fh, \dot{I}]\underline{f}\underline{S}ftf@f{C}f''fX, \delta \\ ff_{\underline{f}}\underline{S}ftf@f{C}f_{\underline{f}}\underline{S}ftf@f{C}f_{\underline{f}}\underline{S}ftf@f{C}f''fX, \delta \\ ff_{\underline{f}}\underline{S}ftf@f{C}f_{\underline{f}}\underline{S}ft@f{C}f_{\underline{f}}\underline{S}ft@f{C}$ 

fŠftf@fŒf"fX,ðŽw'è[E•Ï[X,·,é,ðŽg—p,·,é,É,Í[A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[B

 $1. ftf@fCf < f \check{S}ftf@f \pounds f ``f X, \delta \bullet \ddot{I} \Box X, \cdot, \acute{e}f \pounds f R \Box [fh, \delta `I ` \delta, \mu, \ddot{U}, \cdot \Box B$ 

 [fXfNfŠfvfg]f□fjf...□[,©,ç[fŠftf@fŒf"fX,ðŽw'è□E•Ï□X,·,é],ð'l'ð,μ□A□X□V,·,éŠefŒfR□[fh,É'Î ‰ž,·,é□V,µ,¢ftf@fCf<,ð"Á'è,µ,Ü,·□B</li>

$$\label{eq:constraint} \begin{split} & []V,\mu, \mbox{$\mathbb{C}$} f, \mbox{$\mathbb{C}$}, \mbox{$\mathbb{C}$} f, \mbox{$\mathbb{C}$} f, \mbox{$\mathbb{C}$} f, \mbox{$\mathbb{C}$} f, \mbox{$\mathbb{C}$}, \mbox{$$

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A□€-Ú</u>

#### ©Cumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p ©ftf@fCf‹fŠftf@fŒf"fX,ÌŠÇ—□ ftfHf‹f\_,ð^Ú"®,∙,é

[]mftfHf<f\_,ð^Ú"®,∙,é[]n,ðŽg—p,∙,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

 $1. [fXfNfŠfvfg]f[]fjf...[[, ©, c]]mftfHf < f_, ð^U " @, , , é]n, ð'l' ð, \mu]A^U " @, , , éftfHf < f_, ð " A' è, \mu, Ü, \cdot]B$ 

2. ftfHf‹f\_,ð'l'ð,·,é,Æ□A^Ú"®□æ,ðŽw'è,·,é,æ,¤—v‹□,³,ê,Ü,·□B

3. ftfHf‹f\_,¨,æ,Ñ,»,ÌfTfuftfHf‹f\_,·,×,Ä,ª□V,μ,¢□ê□Š,É<sup>´</sup>Ú" ® ,μ,Ü,·□B

^Ú"®,μ,½ftf@fCf<,ðަ,∙fAfNfefBfu,ÈfJf^f□fO′†,ÌfŒfR□[fh,ª□X□V,³,ê□A□V,μ,¢□ê□Š,ðަ,∙,æ,¤ ,É,È,è,Ü,·□B

\_V,μ,¢\_]ê\_]Š,É, ,éftf@fCf<,Ì]C\_]³"ú,ªfŒfR[][fh,É<L~^,³,ê,Ä,¢ ,é[]C\_]³"ú,æ,è,à[]V,μ,¢[]ê[]‡,Í[]ACumulus,Í,»,ê,É[]],Á,ÄfŒfR[][fh,ð[]X[]V,·,é,©,Ç,¤ ,©,ðft[][fU,ÉŠm"F,μ,Ü,·[]B

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A□€–Ú</u>

## ©Cumulus,ÌŽg—p—á © Cumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p DCSftf@fCf<,ÌŠÇ—[]

fqf"fg: ^ȉº,Ìf,fWf...[[f<,Í[]ADCS 1.0ftf@fCf<,Å,È,¢ftf@fCf<,É'Î,µ,Ä,àŽÀ[]s,·,é,± ,Æ,ª,Å,«,Ü,·[]B'½[]",Ìftf@fCf<,ðfRfs[[,Ü,½,Í^Ú"®,·,é[]ê[]‡,Í[]A,±,ê,ç,Ìf,fWf...[[f<,ðŽg p,·,é•û,ª[]ACumulus,Ìf][fj...[[fRf}f"fh([]uftf@fCf<,ÌfRfs[][]v,¨,æ,Ñ[]uftf@fCf<,Ì^Ú"®[]vŽQ[]Æ) ,ðŽg—p,·,é,æ,è,à'ZŽžŠÔ,Å[]Ï,Þ,±,Æ,ª, ,è,Ü,·[]B

$$\begin{split} & \mathsf{DCSftf@fCf} < \mathbb{E}^{\mathbb{Z}} \otimes , \hat{I} \square A' \acute{a} \\ & \otimes \delta' @'' x, \dot{I} \bullet_{i} \square \ddagger f \square f Cf'' f t f @ f Cf', ^{a} 1, \hat{A}, \mathcal{E} \square Af Vf Af'' \square Af \} f [f''f ^ \square Af Cf Gf \square [ \square Af uf ‰ f bf N, \dot{I} ^ o \square uf Jf ‰ \square [, É' \hat{I} & \& z, \cdot, \acute{e} 4, \hat{A}, \dot{I}' P \square Ff t f @ f Cf', ^{A} \square (\square \neg , ^{3}, \hat{e}, \square, \cup \square B C u m u l u s, \overset{A}, \dot{I} \square A D C S \\ & 1.0ft f @ f Cf', \dot{I} \mathcal{C} f R \square [ f h, \dot{I} \square f Cf'' f t f @ f Cf', ^{3}_{4}, ^{-}, \delta f ] f ^ f \square f O, \mu, \square, \cup \square B' ^ Z \check{z}, \acute{E} 5, \hat{A}, \dot{I} t f @ f Cf', \cdot, \times, \ddot{A}, \dot{I} f R f s \square [ \square A^ U'' \otimes \square A \square I \square (\square e, \delta \square s, x, \acute{E}, \dot{I} \square \dot{E}^{''} J, W f ... \square [ f', \delta \check{Z} g - p, \mu, \ddot{A}, ^{3}_{4}, ^{3}, ¢ \square B \end{split}$$

 $\label{eq:mflfSfWfif<,d[i]@[iDCS'l]%2]]n,l[A'l'd,\mu,½,\cdot,×,Ä,lf@fR[[fh,É'l]%2,\cdot,é,\cdot,×,Ä,lff@fR[[fh,É'l]%2,\cdot,E',A']ftf@fCf<,d[i]@,\mu,Ü,\cdot]B$ 

 $[mflf ŠfWfif <, \delta^{U''} @ []iDCS' l^{w} \mathring{z} ]j []n, l []A'l' \delta, \mu, \frac{1}{2}, \cdot, \times, \ddot{A}, \dot{f} \pounds f R [] [fh, \delta []V, \mu, \xi ]] \hat{e} [] \check{S}, \acute{E} f R f s [] [, \mu, \ddot{U}, \cdot ] B$ 

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A□€–Ú</u>

# ÜCumulus,ÌŽg—p—á ÜCumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p ŒŸ∏õ

^ȉº,Ìf,fWf...□[f<,ðŽg—p,μ,Ä□A<u>ŒŸ□õfc□[f<fo□[,âf]fefSfŠfXfgfEfBf"fhfE</u>,Å,ĺŽg p,Å,«,È,¢ŒŸ□õ,ðŽÀ□s,·,é,±,Æ,ª,Å,«,Ü,·□B

<u>'l'ðfŒfR□[fh,ÌfJfefSfŠ,ÅŒŸ□õ</u>

<u>'èŠú"I,ÉŒŸ⊡õ,∙,é</u>

{button ,AL(`automation',0,`',`')} <u>ŠÖ<sup>~</sup>A□€–Ú</u>

### ŪCumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p ŪŒŸ□õ 'l'ðfŒfR□[fh,ÌfJfefSfŠ,ÅŒŸ□õ

‰ž,·,é,·,×,Ä,ÌJJJefSfŠ,É^ê'v,·,éfŒfR[[fh,ðŒŸ[]õ,·,é,©[]A,»,Ì,¤

,¿,Ì"C^Ó,ÌfJfefSfŠ,É^ê'v,∙,éfŒfR□[fh,ðŒŸ□õ,∙,é,©,ðŽw'è,∙,éf\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,∙□B

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A□€–Ú</u>

# ŴCumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p ŴŒŸ<u>□</u>õ

# 'èŠú"I,ÉŒŸ<u>□</u>õ,∙,é

$$\label{eq:linear_constraint} \begin{split} & [m'èŠú"l,ÉŒŸ[]õ,\cdot,é[]n,Í[]ACumulus,Ì] @ Y[]õfc[][f<fo][, @,ç[]Å@ã,ÉŽÀ[]s,\mu,½@Y[]õfNfGfŠ,ð[]AfAf NfefBfu,ÈfJf^f][fO,É'èŠú"l,É"K—p,\mu,Ü,·]B,±,Ìf,fWf...][f<,ðŽg—p,·,é[]Û,Í[]ACumulusfNf %fCfAf"fg,Ì]]mfXfNfŠfvfg[]nftfHf<f_,ÉfRfs[][,¹, ]]AWindows,ÌfGfNfXfvf]]][f‰, ,@,ç•Ê,ÌfAfvfŠfP[][fVf‡f",Æ,µ,Ä<N" @,µ,Ä,,¾,³,¢]]B \end{split}$$

[]m'èŠú"I,ÉŒŸ[]õ,∙,é[]n,ðŽg—p,∙,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

fqf"fg: ŒŸ[]õfc[[f<fo[[,ÌŽg—p,ÉŠÖ,·,é[]Ú[]×,Í[]A[]uŒŸ[]õfc[][f<fo[[,ÌŽg—p[]v,ðŽQ[]Æ,µ,Ä,-,¾,³,¢[]B

2. [ŒŸ□õ]f{f^f",ðfNfŠfbfN,μ,Ü,·□B

Windows,ÌfGfNfXfvf□□[f‰, ©, ç['èŠú"I,ÉŒŸ□õ, ·, é],ð<N" ®, μ,Ü, ·□B</li>

ŒŸ□õ,ÌŠÔŠu,ðŽw'è,∙,éf\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B

{button ,AL(`automation',0,`',`')} <u>ŠÖ<sup>~</sup>A□€-Ú</u>
# ÜCumulus,ÌŽg—p—á Ѿ Cumulus

**□',**«**□**0,μ**□**^"Ç,Ý**□ž**,Ý

 $f \textcircled{C} f \end{array}{C} f \textcircled{C} f \textcircled{C} f \textcircled{C} f \end{array}{C} f \textcircled{C} f \textcircled{C} f \textcircled{C} f \end{array}{C}$ 

<u>f]fefSfŠ,ðfefLfXfg□o—ĺ</u>

<u>fefLfXfg,ð"Ç,Ý</u>□ž,ñ,ÅfJfefSfŠ,É"o<sup>~</sup>^

<u>Access,Ö,ÌfŒfR□[fh,Ì□',«□o,µ</u>

<u>f^fu<æ∏Ø,èfefLfXfg,É∏',«∏o,µ</u>

<u>fTf€flfCf<,ð□',«□o,·</u>

<u>fCf□□IfWftf@fCf<,ðfTf€flfCf<,É</u>

′□: Windows,Å,ĺBMPftf@fCf<,ªfrfbfgf}fbfv,ɕϊ·,³,ê□AWindows,ÌfTf|□[fg,·,éŒ`,É-¼'O,ª•Ï□X,³,ê,Ü,·□B

{button ,AL(`automation',0,`',`')} <u>ŠÖ<sup>~</sup>A□€-Ú</u>

# ÜCumulus,ÉŠÜ,Ü,ê,鎩"®‱»fXfNfŠfvfg,ÌŽg—p Ü□',«□o,μ□^"Ç,Ý□ž,Ý fJfefSfŠ,ðfefLfXfg□o—ĺ

[ʃ]fefSfŠ,ðfefLfXfg[]o—ĺ]

,İ[]AfAfNfefBfu,ÈfJJf^f[]fO,ÌfJfefSfŠŠK'w,ðfefLfXfgftf@fCf<,É[]',«[]o,μ,Ü,·[]BŠefJfefSfŠ,İ[]AŠK'w[]\'¢ ,Å,ÌfŒfxf<,ɉž,¶,½ŒÂ[]",Ìf^fu,ÅfCf"fff"fg,³,ê,Ä<L[]q,³,ê,Ü,·[]BfhfLf... f[]f"fg,ðfefLfXfgftf@fCf<,Æ,μ,ĕۑ¶,μ[]A[fJ]fefSfŠ,ðfefLfXfg[]o—Í]f,fWf...[[f<,ðŽg p,μ,Ä'¼,ÌfJf^f]]fO,É"Ç,Ý[]ž,Þ,±,Æ,ª,Å,«,Ü,·[]B

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A□€–Ú</u>

# Cumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p [0,μ]^"Ç,Ý]ž,Ý fefLfXfg,ð"Ç,Ý]ž,ñ,ÅfJfefSfŠ,É"o<sup>^</sup>

$$\label{eq:linearconductor} \begin{split} & \| mfefLfXfg, \delta^{\prime\prime}C, Y \| \check{z}, \check{n}, \hat{A}f \| fefSf \check{S}, \dot{E}^{\prime\prime}o^{~} \| n, \dot{\|} AfefLfXfgftf@fCf <, @, cflfefSf \check{S}, \dot{h}f \check{S}fXfg, \delta^{\prime\prime}C, \dot{Y} \| \check{z}, \dot{Y}, \ddot{U}, \cdot \| \\ & BfefLfXfgfhfLf...f \| f^{\prime\prime}fg, \acute{E}, \dot{h} \| AflfefSf \check{S}, \overset{a}{a} \| s, \acute{E}, \hat{A}, < 1, \hat{A}, , \hat{A} \| A \check{S} K^{\prime} w \| \langle \dot{q}, \dot{A}, \dot{h} E f K f <, \acute{E} \\ & \& \check{z}, \P, \frac{1}{2} \mathbb{C} \hat{A} \| \| A \check{S} f C f^{\prime\prime} f f f f f f , \overset{a}{a}, \dot{e}, \ddot{A}, < L \| q, \overset{a}{a}, \dot{e}, \ddot{A}, \langle \dot{U}, \cdot \| B, \pm \\ & , \dot{h} f X f N f \check{S} f v f g, \dot{h} \| A \check{S} e \| s, \delta^{\prime\prime} C, \dot{Y}, \mathcal{R}, \dot{e} \| A f A f N f e f B f u, \check{E} f f \| f O' \dag, \acute{E} \| V, \mu, \langle f f f f f S f \check{S}, \delta \| \| \neg \ \eta, \mu, \ddot{U}, \cdot \| B \end{split}$$

{button ,AL(`automation',0,`',`')} <u> $\dot{SO}^{A} \subseteq \in U$ </u>

# UCumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p U(),«[]o,μ[]^"Ç,Ý[]ž,Ý Access,Ö,ÌfŒfR[[fh,Ì]',«[]o,μ

[Access,Ö,ÌfŒfR□[fh,Ì□',«□o,μ],Í□A□î•ñ,ðCumulus,ÌfŒfR□[fh,©,çMS Access,Ìff□[f^fx□[fX,ÉfRfs□[,µ,Ü,·□BMS Access,É,Í□AfCf"fXfg□[f<,³,ê,Ä,¢,éCumulus -> MS Accessff□[f^fx□[fX,ÌftfB□[f<fh,É^ê'v,·,éftfB□[f<fh,ªŠÜ,Ü,ê,Ä,¢,é•K—v,ª, ,è,Ü,·□B

Cumulus,Ìf@fR[[fh,ðMS Access,ÉfGfNfXf|[[fg,·,é,É,Í[A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

1. Cumulus -> MS Accessff[[f^fx[[fX,ÌfRfs[[,ð[]`u¬, $\mu$ ,Ü,·<code>uB</code>]

2. MS Access,ð<N" ® ,µ,Ü,·□B

MS Accessff□[f^fx□[fX,É□',«□o,·fŒfR□[fh,ð'l'ð,µ,Ü,·□B

[Access,Ö,ÌfŒfR□[fh,à□',«□o,μ],ðŽÀ□s,μ,Ü,·□B

5.  $(\dot{Z}_{3}, \hat{e}, 2 f_fCfAf_fO, A_AKS Accessff_[f^fx_fx_fX, iftf@fCf^, \delta'I'\delta, \mu, U, OB Accessff_[f^fx_fx_fX, iftf@fCf^, \delta'I'\delta, \mu, U, OB Accessff_[f^fx_fX, iftf@fCf^, \delta'I'\delta, \mu, OA Accessff_[f^fx_fX, iftf@fCf^, \delta'I'\delta, \mu, OA Accessff_[f^fx_fX, iftf@fCf^, \delta'I'\delta, \mu, OA Accessff_[f^fx_fX, iftf@fCf^, \delta'I'\delta, \mu, OA Accessff_[f^fx_fX, iftf@fCf^, \delta'I'\delta, \mu, OA Accessff_[f^fx_fX, iftf@fCf^, \delta'I'\delta, \mu, OA Accessff^, \delta'I'\delta, \mu, OA Accessff^, \delta'I'\delta, \mu, OA Accessff^, \delta'I'\delta, \mu, OA Accessff^, \delta'I'\delta, \mu, OA Accessff^, \delta'I'\delta, \mu, OA Accessff^, \delta'I'\delta, \mu, Accessff^, \delta'I'\delta, \mu, Accessff^, \delta'I'\delta, \mu, Accessff^, \delta'I'\delta, \mu, Accessff^, \delta'I'\delta, \mu, Accessff^, \delta'I'\delta, \mu, Accessff^, \delta'I'\delta, \mu, Accessff^, \delta$ 

{button ,AL(`automation',0,`',`')} <u>ŠÖ<sup>~</sup>A□€-Ú</u>

# <sup>[I]</sup>Cumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p <sup>[I]</sup>[',«]o,μ]^"Ç,Ý]ž,Ý f^fu<æ]Ø,èfefLfXfg,É]',«]o,μ </pre>

 $[f^{fu} \ll 0, e^{fe} fLfXfg, E^{'}, \ll 0, \mu]$ 

,Ĩ□ĂſĂſŇſeſBſu,ÈſJſ^ſŪſŎ,Å'Ī'ð,µ,½ŠeſŒſR□[ſh,ðŠÜ,Þ□',«□o,µſtſ@ſCſ‹,ð□ì□¬,µ,Ü,·□B□',«□o,µſtſ@ ſCſ‹,É,ĺ□A—ñ,Ì-

<sup>1</sup>¼<sup>′</sup>O,ðަ,·□s,Æ□A'l'ð,μ,½ŠefŒfR□[fh,Ì□î•ñ,ðf^fu,Å‹æ□Ø,Á,½□s,ªŠÜ,Ü,ê,Ü,·□B<u>fTf€flfCf‹</u>,¨,æ,Ñftf @fCf‹Œ`Ž®ŒÅ—L,Ì□î•ñ,Í□',«□o,³,ê,Ü,¹,ñ□B

 $[f^fu < @[0,e]fefLfXfg, E[]', &[]o, \mu], \delta Zg - p, \cdot, e, E, I[]A^E > 0, IZe[]+, E[], c, U, \cdot []B$ 

2. [fXfNfŠfvfg]f[f]fj... $[[, ©, c[f^fu<@[0,e]fefLfXfg, E[', «[o,µ], \delta'l'\delta, µ, Ü, ·[B] ]$ 

3. •\ަ,<sup>3</sup>,ê,éf\_fCfAf[]fO,Å[]A[]',«[]o,µftf@fCf<,Ìftf@fCf<- $\frac{1}{4}$ , ",æ,Ñ[]ê[]Š,ðŽw'è,µ,Ü,·[]B

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A∏€–Ú</u>

### ŪCumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p Ū□',«□o,μ□^"Ç,Ý□ž,Ý fTf€flfCf<,ð□',«□o,·

[fTf€flfCf<,ð□',«□o,·] ,Í□AfAfNfefBfu,ÈfJf^f⊡fO,Å'I'ð,µ,½fŒfR□[fh,É'Î,µ,Ä□V,µ,¢BMPftf@fCf<,ð□ì□¬,µ□AfŒfR□[fh,Ì<u>fTf€f</u> <u>lfCf<</u>,ð,»,Ìftf@fCf<,É□',«□ž,Ý,Ü,·□B

[fTf€flfCf<,ð□',«□o,·],ðŽg—p,·,é,É,Í□A^ȉ⁰,ÌŽè□‡,É□],¢,Ü,·□B

1. fTf€flfCf<,ð□',«□o,·fŒfR□[fh,ð'l'ð,μ,Ü,·□B

[fXfNfŠfvfg]f□fjf...□[,©,ç[fTf€flfCf<,ð□',«□o,·],ð'l'ð,µ,Ü,·□B</li>

ʻl'ð,μ,½ŠefŒfR□[fh,ÉʻÎ,μ,Ä□A□ì□¬,·,éBMPftf@fCf‹,Ì-¼'O,¨,æ,Ñ□ê□Š,ðŽw'è,μ,Ü,·□BffftfHf‹fg,Ì-¼'O,Í□AfŒfR□[fh,ÉʻΉž,·,éftf@fCf‹-¼,É,È,è,Ü,·□B

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A $\Box \in -\dot{U}$ </u>

# ŪCumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p Ū□',«□o,μ□^"Ç,Ý□ž,Ý fCf□□[fWftf@fCf‹,ðfTf€flfCf‹,É

[fCf□□[fWftf@fCf‹,ðfTf€flfCf‹,É],Í□ABMPftf@fCf‹,ð1,Â,ÌfŒfR□[fh,Ì<u>fTf€flfCf‹</u>,Æ,μ,ÄŽg—p,μ,Ü,·□B [fCf□□[fWftf@fCf‹,ðfTf€flfCf‹,É],ðŽg—p,·,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

1. fTf€flfCf<,ð[]ì[]¬,∙,éfŒfR[][fh,ð'l'ð,μ,Ü,·[]B

2. [fXfNfŠfvfg]f□fjf...□[,©,ç[fCf□□[fWftf@fCf<,ðfTf€flfCf<,É],ð'l'ð,μ,Ü,·□B

ʻl'ð,μ,½fŒfR□[fh,ÌfTf€flfCf<,ªBMPftf@fCf<,̉æ'œ,Æ'u,«Š·,¦,ç,ê,Ü,·□B

{button ,AL(`automation',0,`',`')}  $\underline{\mathring{SO}^{a}\underline{}\in\underline{-U}}$ 

#### ÜCumulus,ÌŽg—p—á ŪCumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p □Å"K‰»,Æ"□Œv□î•ñ

Cumulus,É,Í□AfJf^f□fO,ð□Å"K‰»,·,éf,fWf… □[f<,¨,æ,ÑfJf^f□fO'†,ÌfŒfR□[fh,ÉŠÖ,·,é□î•ñ,ðŽæ"¾,·,éf,fWf…□[f<,ªŠÜ,Ü,ê,Ä,¢,Ü,·□B

 $\begin{array}{l} [f]f^f[]fO[]\acute{Y}'e,\deltafXfs[][fh-D]]æ,É],I[]ACumulus,^af]f^f[]fO[]^--[],\delta[],'¬,ÉŽÀ[]s,·,é,æ,¤, \\ ,É[]Af]Jf^f[]fOfIfvfVf‡f",\delta[]Å"K‰»,\mu,Ü,·]BfXfNfŠfvfg,\deltaŽÀ[]s,·,é,Æ[]A[]\acute{Y}'e,Ì•Ï[]X,ð-LŒø,É,·,é,©,Ç,¤,©,\deltaŠm"F,·,é,æ,¤f†[][fU,É--v<[],\mu,Ü,·]B \\ \end{array}$ 

[f]f^f[]fO[]Ý'è,ð^À'S[]«—D[]æ,É],Í[]Aff[][f^fx[][fX[]Ý'è,Æf]f^f[]fO[]EfIfvfVf‡f",ð[]Å"K ‰»,µ,Äff[][f^'¹Ž¸,ð–hŽ~,·,éf,fWf...][f<,Å,·[]B[]Ý'è,Ì•Ï[]X,ð[]s,¤'O,ÉŠm"F,ª[]s,í,ê,Ü,·[]B

[ftf@fCf‹Œ`Ž®,ð[]",¦,é] ,ĺ[]A[]V,μ,¢fefLfXfgfEfBf"fhfE,ð[]ì[]¬,μ[]AfAfNfefBfu,ÈfJf^f[]fO,©,çŽQ[]Æ,³,ê,Ä,¢ ,é'¼,Ìftf@fCf‹Œ`Ž®,Æ[]AŠeftf@fCf‹Œ`Ž®,É'Ήž,·,éfŒfR[[fh[]",ÌfŠfXfg,ð•\ަ,μ,Ü,·[]B

{button ,AL(`automation',0,`',`')} <u>ŠÖ<sup>~</sup>A□€-Ú</u>

## <sup>III</sup>Cumulus,ÌŽg—p—á III Cumulus,ÉŠÜ,Ü,ê,鎩"®‰»fXfNfŠfvfg,ÌŽg—p '¼,ÌfAfvfŠfP□[fVf‡f",Æ,Ì~AŒg

,<sup>3</sup>,Ü,´,Ü,È•û-@,Å[]ACumulus,ð'¼,ÌOLE,É,æ,鎩"®‰»'ΉžfAfvfŠfP[[fVf‡f",Æ~AŒg,·,é,± ,Æ,ª,Å,«,Ü,·[]B^ȉº,ÌŠî-{"I,È<u>fXfNfŠfvfg</u>,ªŠÜ,Ü,ê,Ä,¢,Ü,·,Ì,Å[]A,»,ê,ðŽg p,µ,ÄCantoŽĐ,ÌWebfTfCfg(http://www.canto-software.com),ð'èŠú"I,ÉŠm"F,µ[]A[]Å[]V,Ì'Ç ‰Á[]î•ñ,ð"üŽè,µ,Ä,,¾,³,¢[]B

{button ,AL(`automation',0,`',`')} <u>ŠÖ~A□€–Ú</u>

# fgf‰fuf<fVf...[[fefBf"fO

<u>^ê"Ê"I,È-â'è,̉ðŒ^</u> <u>,²Ž¿-â,Ì'O,É</u>

# Üfgf‰fuf‹fVf…□[fefBf"fO ^ê"Ê"l,È-â'è,̉ðŒ^

 $,\pm, lfZfNfVf\sharp f'', \text{\texttt{A}}, \text{\texttt{I}} \square \text{\texttt{A}}^{\circ} \text{\texttt{e}}'' \text{\texttt{E}}'' \text{\texttt{I}}, \text{\texttt{E}}-\text{\texttt{a}}' \text{\texttt{e}}, \text{\texttt{\mathcal{R}}}, \text{\texttt{w}}, l \text{\texttt{W}} \text{\texttt{A}}'' \text{\texttt{,}} \text{\texttt{E}} \text{\texttt{W}} \text{\texttt{\delta}} \text{\texttt{C}}^{-} \square \hat{0}, \text{\texttt{\delta}} \square \text{\texttt{D}} \text{\texttt{W}} \hat{1}, \mu, Ü, \cdot \square B$ 

- I <u>fTf€flfCf<,Ì•\ަ•û-@,ð•ï</u>□X,Å,«,Ü,·,©?
- □ <u>CumulusfJf^f□fO,ÆfIfŠfWfif<ftf@fCf<,ðCD-ROM,Å"z•z,·,é,É,Í?</u>
- $\begin{array}{c} & \underline{flf\check{S}fWfif\scriptstyle{<}, \delta fRfs_{\scriptstyle{[}}[, \ddot{U}, \frac{1}{2}, \hat{l}^{\,\,} \dot{U}^{\,\,''} \circledast , \cdot, \acute{e}_{\scriptstyle{]}} \dot{U}_{\scriptstyle{]}} A\check{Z}\check{A}_{\scriptstyle{]}} s, \mathring{A}, \ll, \grave{E}, @, \acute{A}, \frac{1}{2}, \grave{e}\check{Z}_{,\,\,''} s, \cdot, \acute{e}, \pm, \mathcal{A}; \overset{a}{,} , \grave{e}, \ddot{U}, \cdot_{\scriptstyle{]}} B, \underline{C}, \varkappa, \cdot, \acute{e}, \hat{l}, \frac{1}{2}, \underbrace{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, @, \overset{a}{,} \dot{A}, \cdot, & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a}{,} & \overset{a$
- □ <u>Cumulus, ©, cftf@fCf<,ð-v<[,.,é,Æ[A•K, CD-ROM, lf}fEf"fg,ð<[,ß,c,ê,Ü,·[B,C,¤,·,ê, l,±,ê,ð] ‰ñ"ð,Å,«,Ü,·,©?</u>
- I <u>fhf‰fbfO&fhf□fbfv,ðŽg,Á,Äftf@fCf<,ðfRfs□[,µ,Ü,µ,½□BfRfs□[]æ,ĺfnfCf</u> <u>‰fCfg,³,ê,Ü,µ,½,ª□Af}fEfXf{f^f",ð—£,µ,Ä,à‰½,à<N,±,è,Ü,¹,ñ□B‰½,ª,¢</u> ,¯,È,©,Á,½,Ì,Å,µ,å,¤?
- $\begin{array}{c} \underline{[V,\mu, \mathsf{cftf}@fCf``a-e,\delta\check{S}\ddot{U}, \mathsf{B}, \acute{e}, \frac{1}{2}, \mathsf{B}[A, \cdot, \times, \ddot{A}, \dot{I}fCfR[[fh, \delta]X[V,\mu, \ddot{U},\mu, \frac{1}{2}, \frac{a}{2}] & \frac{1}{2}, \dot{a} < \mathsf{N}, \pm \\ \underline{, \dot{e}, \ddot{U}, \overset{1}{,} \ddot{n}[B, \mathcal{G}, \mathtt{x}, \mu, \ddot{A}, \dot{A}, \mu, \dot{a}, \mathtt{x}] & \end{array}$
- I <u>fJf^f□f0□î•ñ,ð•Ê,Ìfvf□f0f‰f€,É□',«□o,·,É,Í?</u>
- I <u>fJf^f□fOŠÔ,Åfhf‰fbfO&fhf□fbfv,·,é,Æ□V<KfJfefSfŠ,ªfJfefSfŠfEfBf"fhfE,É•\</u> Ž<u>¦</u>,<sup>3</sup>,ê,Ü,·<u>□</u>B,È,<sup>e</sup>,Å,µ,å,¤?
- <u>Cumulus,Å,ÍDCSftf@fCf<,ð,Ç,Ì,æ,¤,É<sup>^</sup>μ,Á,½,ç,¢,¢,Ì,Å,μ,å,¤,©?</u>
- □ <u>'á</u>

<u><sup>\_</sup>\_\_\_\_\_</sup>δ'œ"x,ÌOPlftf@fCf<,ðfJf^f□fO,μ,Ä□A,»,ê,ð∙¶□',É'}"ü,μ,Ä^ó□ü,·,é□ê□‡□ACumulus,ª^ó□ü'†,</u> É<u>□,‰ð'œ"xftf@fCf<,É'u,«Š·,¦,Ä,,ê,é,Ì,Å,μ,å,¤,©?</u>

# <sup></sup><sup>∭</sup>^ê"Ê"I,È-â'è,¨,æ,щðŒ^<u></u>ô fTf€flfCf‹,Ì•\ަ•û-@,ð•Ï□X,Å,«,Ü,·,©

# <sup></sup><sup>∭</sup>^ê"Ê"I,È-â'è,<sup>¨</sup>,æ,щðŒ^<u></u>ô CumulusfJf^f⊡fO,ÆfIfŠfWfif‹ftf@fCf‹,ðCD-ROM,Å"z•z,∙,é,É,Í?

Cumulus Browser,ð,²Žg—p,,¾,³,¢[]BCumulus Browser,ĺ[]ACumulusfJf^f[]fO,ðCD-ROM,Ü,½,ĺ,»,l<sup>1</sup>¼,ÌfŠf€[][fofuf‹f][fffBfA,Å"z•z,·,é,½,ß,Ì]A-³—¿,ÅŽg—p,Å,«,éfAfvfŠfP][fVf‡f",Å,·[]B[]u<u>Cumulus Browser,ÌŽg—p</u>[]v,ðŽQ[]Æ,µ,Ä,,¾,³,¢[]BCumulus Browser,ðŽg,Á,ÄfJf^f[]fO,ð"z•z,·,éŽè[]‡,É,Â,¢,Ä,Í[]A[]w<u>Cumulusf†[][fefBfŠfefBf}fjf...</u>fAf<[]x,ðŽQ[]Æ,µ,Ä,,¾,³,¢[]B

### <sup></sup><sup>[</sup><sup>¶</sup> <sup>°</sup><sup>¶</sup> <sup>°</sup><sup>¶</sup> <sup>°</sup><sup>†</sup>,æ,щðŒ<sup>°</sup><sup>¶</sup> flfŠfWfif<,ðfRfs□[,Ü,½,Í<sup>°</sup>Ú"®,∙,é□Û□AŽÀ□s,Å,«,È,©,Á,½,èŽ<sub>.</sub>"s,∙,é, ±,Æ,ª, ,è,Ü,·□B,Ç,¤,∙,ê,Î,¢,¢,Å,∙,©?

flfŠfWfif<,ÌfŠftf@fŒf"fX,ª[]X[]V,³,ê,Ä,¢,È,¢,æ,¤,Å,·[]BflfŠfWfif<ftf@fCf<,²,Ç,±,É, ,é,©,í,©,Á,Ä,¢, ,é,È,ç[]AfŒfR[[[fhf[]fjf...[][,©,ç[<u>fŠftf@fŒf"fX,ðŠm"F]</u>,ð'l'ð,µ,Ä]A<u>ftf@fCf<[]EfŠftf@fŒf"fX</u>,ð]X[]V,µ,Ä,,¾,³,¢[]B

#### <sup></sup><sup>∭</sup>^ê"Ê"I,È-â'è,¨,æ,щðŒ^<u></u>ô Cumulus,©,çftf@fCf‹,ð—v‹[,∙,é,Æ[A•K, CD-ROM,Ìf}fEf"fg,ð‹[,ß,ç,ê,Ü,∙]B,Ç,¤,∙,ê,Î,±,ê,ð‰ñ"ð,Å,«,Ü,∙,©?

Cumulus,Í[]ACD-ROM,âSyQuest[]AZip[]AJaz[]A,<sup>••</sup>,æ,ÑMOfJ[][fgfŠfbfW,È,Ç,Ìflftf ‰fCf"[]EfŠf€[][fofuf‹f]]fffBfA,ðŠÜ,Þ'½Ží'½—I,Èf^fCfv,Ìf[]fffBfA,ÅflfŠfWfif‹ftf@fCf‹,ðŠÇ— ],Å,«,Ü,·]B•p"É,ÉŽg—p,·,éflfŠfWfif‹,ðfn[][fhfhf‰fCfu,É•Û'¶,µ[]AfŠftf@fŒf"fX,ð•Ï[]X,·,é,±,Æ,É,æ,Á,Ä[]Af}fEf"fg—v<[],Æ'†'f,̉ñ[]",ðŒ,,ç,·,±,Æ,ª,Å,«,Ü,·]]B

#### 

 $f\dagger [[fU, \acute{E}, \acute{I}]AfRfs][, \mu, æ, ¤, Æ, \cdot, \acute{e}fIfŠfWfif {ftf@fCf <, \acute{E}' \hat{I}, \cdot, \acute{e}fAfNfZfX @, ª, È, ¢, à, Ì, ÆŽv, í, ê, Ü, \cdot ]]B$ 

,±,Ì-â'è,ð‰ðŒ^,∙,é,É,Í□ACumulus,ªftf@fCf‹ŒŸ□õ,Ì,½,ß,ÉŽg—

 $p,\cdot,\acute{ef} \underbrace{\check{S}ftf@f{@f}}_{,a}^{f}, \delta\check{S}m'F, \mu, U, \cdot \BoxBftf@fCf < \BoxEf\check{S}ftf@f{Cf} < df'f} \\ \mathcal{A}, (1) \underbrace{\check{S}m'F, A, I \Box Aflf\check{S}fWfif < df'f}_{,a}^{a}, f \subseteq G, a \in \mathbb{C}, a \in$ 

,©,ªŠm"F,³,ê,Ü,·□BCumulus,ªflfŠfWfif<,ðŒ©,Â,¯,ç,ê,È,¢□ê□‡□Af\_fCfAf□fOf{fbfNfX,ªŠJ,«□A,»,± ,É□V,μ,¢^Ê'u,ðŽw'è,Å,«,Ü,·□Bftf@fCf<□EfŠftf@fŒf"fX,ðŠm"F,·,é,É,Í□AflfŠfWfif<ftf@fCf<,É'Î,·,éfA fNfZfXŒ,ª•K—v,Å,·□B

#### fŒfR[[[fh,Ìftf@fCf<[EfŠftf@fŒf"fX,ðŠm"F,·,é,É,ĺ

- $1. \ \underline{f \oplus f R \square [fhf E f B f "fhf E, A \square A Š m "F, \cdot, \acute{e} f \oplus f R \square [fh, \delta' l' \delta, \mu, Ü, \cdot \square B$
- fŒfR□[fhf□fjf...□[,Å"fŠftf@fŒf"fX,ðŠm"F",ðfNfŠfbfN,μ,Ü,·□B

Cumulus,ª,·,×,Ä,Ìftf@fCf‹[EfŠftf@fŒf"fX,ðŠm"F[]i,Ü,½,ÍŒ^'è[]j,µ,Ü,·[]B

#### 

 $\frac{f \underline{G} f \underline{R} [[fh,] \underline{X} \underline{V}, \ddot{U}, \dot{U}_{2}, \dot{I}_{0} \underline{S} \underline{X} \underline{V} ([uf \underline{G} f \underline{R} \underline{I} f \underline{H} \underline{\Pi}^{\bullet} \tilde{n}, \dot{I} \underline{X} \underline{V} \underline{V} \underline{V} \underline{Z} \underline{U}, \dot{U}_{2},$ 

 $ft_[fU'e^{,,l_{n,f_{1}}}]ft_{1}ft_$ 

# <sup>∭</sup>^ê"Ê"I,È-â'è,<sup>¨</sup>,æ,щðŒ^<u></u>ô fJf^f□fO□î•ñ,ð'¼,Ìfvf□fOf‰f€,É□',«□o,·•û-@

#### 

 $\begin{array}{l} Cumulus, lfJf^f[]fO, Å, l[]AŠÜ, Ü, ê, éfJfefSfŠ, ^afJf^f[]fO, ^2, Æ, É^á, ¢[]AfJfefSfŠ[]\'¢\\ , à, », ê, <sup>1</sup>/4, ê^U, È, é[]ê[]‡, ^a, , è, Ü, · []BfŒfR[][fh, ð' ^1/4, lfJf^f]]fO, Éfhf\\ ‰fbfO, ·, é[]A, Ü, <sup>1</sup>/2, l"Ç, Ý[]ž, Ü, <sup>1</sup>, é, Æ[]A^Ú" ®[]æ, lfJf^f[]fO, É, l'¶[]Ý, µ, È, ¢fJfefSfŠ, <sup>a</sup>"o<sup>~</sup>^, <sup>3</sup>, ê, é[]ê[]‡, <sup>a</sup>, , è, Ü, · []B, », l]]e[]‡, []AŽÀ[]Û, É, l'¶[]Ý, µ, È, ¢fJfefSfŠ, <sup>a</sup>"o<sup>~</sup>^, <sup>3</sup>, ê, é[]e[]‡, <sup>a</sup>, , è, Ü, · []B, », l]]e[]‡, []AŽÀ[]Û, É, l'¶[]Ý, µ, È, ¢fJfefSfŠ, <sup>a</sup>"o<sup>~</sup>, <sup>3</sup>, ê, é[]e[]‡, <sup>a</sup>, , e, Ü, · []B, », l]]e[]‡, []AŽÀ[]Û, É, l'¶[]Ý, µ, È, ¢fJfefSfŠ, <sup>a</sup> 'U' ®[]æ, lfJf^f[]fO, ÉŽ© " ® "I, É[]l]¬, <sup>3</sup>, ê, Ü, · []B$ 

,±,ê,ð-

hŽ~,·,é,É,Í□A^ê•û,ÌfJf^f□fO,ÌfJfefSfŠfŠfXfgfEfBf"fhfE,©,ç,à,¤^ê•û,ÌfJf^f□fO,ÌfJfefSfŠfŠfXfgfEfBf" fhfE,ÖfJfefSfŠ,ðfRfs□[,µ,Ä,©,ç□AfŒfR□[fh,ðfRfs□[,µ,Ü,·□B

#### 

Cumulus,Å,Í[]A[]î•ñ,ª•W[]€"I,ÈŒ`Ž®,ŕۑ¶,³,ê,Ä,¢ ,ê,Î[]Aftf@fCf<,©,çfm[[fg,¨,æ,ÑfL[[f]][[fh,ðŽ©"®"I,É"Ç,Ý,Æ,é,±,Æ,ª,Å,«,Ü,·[]B

ftf@fCf‹,ÌfJf^f[]fOŽž,ÉŽ©"®"I,Éfm[[fg[]î•ñ,ð"Ç,Ý,Æ,é,É,Í[]A[fJf^f[]fOflfvfVf‡f"]f\_fCfAf[]fOf{fbfNf X,Å[<u>flfŠfWfif<,©,çfm[[fg,ðŽæ,è[]ž,Þ</u>],ð—LŒø,É,µ,Ü,·([]u[^ê"Ê]f^fu[]vŽQ[]Æ)[]B

# <sup>∭</sup>^ê"Ê"l,È-â'è,<sup>¨</sup>,æ,щðŒ^<u></u>]ô DCS•ª"Åftf@fCf<,ðCumulus,ÅŽg—p,-,é•û-@

DCS 1.0ftf@fCf<,Í[A1,Â,Ìf]fCf"ftf@fCf<,Æ[AfVfAf"]Af}f[f"f^]AfCfGf[][[Afuf‰fbfN,Ì4,Â,Ìf]f 

#### <sup></sup><sup></sup><sup>¶</sup><sup>2</sup><sup>°</sup><sup>°</sup><sup>°</sup><sup>°</sup><sup>°</sup>,æ,щðŒ<sup>°</sup><sup>°</sup><sup>°</sup> Cumulus,ĺfJf<sup>°</sup>f<sup>°</sup>f0,³,ê,½'á ‰ð'œ"x,ÌOPIftf@fCf<,ð<sup>°</sup>,‰ð'œ"x,Ìftf@fCf<,É'u,«Š·,¦,Ä,-,ê,é,Ì,Å,·,©?

Cumulus,ĺ[]A'½,,ÌOPlfVfXfef€,ÆŠ®'S,Ȍ݊·[]«,ª, ,è[]A,·,×,Ä,̊‹«,ÅŽ©"®‰»fVfXfef€ ,Ì"y'ä,Æ,µ,ÄŽg—p,·,é,±,Æ,ª,Å,«,Ü,·[]B[]Ú[]×,ĺ[]A[]u<u>Cumulus,ÌŽ©"®‰»[</u>]v,ðŽQ[]Æ,µ,Ä,,¾,³,¢[]B

#### 

Kodak Shoebox,ĺ[]AfJf^f[]fO"à,Ìftf@fCf‹,Ì[]ê[]Š,ÉŠÖ,·,é,³,Ü,´,Ü,È[]î•ñ,ð•ÛŽ[],μ,Ä,¢,Ü,·[]B,± ,Ì[]î•ñ,ðŽg—p,μ,ÄŠ®'S,ÈCumulus,Ì<u>ftf@fCf‹fŠftf@fŒf"fX</u>,ð[]ì[]¬,·,é,± ,Æ,Í,Å,«,Ü,¹,ñ[]B•Û'¶,Å,«,é,Ì,Í[]Aftf@fCf‹,ÌfpfX-¼,¾,¯,Å,·[]B

Cumulus,ÅŠ®'S,Èftf@fCf‹fŠftf@fŒf"fX,ðŽæ"¾,·,é,É,Í[]AfJf^f[]fO,ÅŠÇ—[],·,éŠeCD-ROM,É'Î,µ,Ä[]Aftf@fCf‹fŠftf@fŒf"fX,ð'²,×,Ü,·[]B[]Ú[]×,Í[]A[]u<u>ftf@fCf‹fŠftf@fŒf"fX,ÌŠm"F[</u>]v,ðŽQ []Æ,µ,Ä,,¾,³,¢]]B

# ∭fgf‰fuf<fVf…[[fefBf"fO ,²Ž¿-â,Ì'O,É

Cumulus,ª□³□í,É"®□ì,µ,È,¢□ê□‡,Í□A□ó<µ,ðŠm"F,µ,Ä□A–â'è,ª"□¶,·,é,Ü,Å,Ì'€□ì,ðŒJ,è•Ô,µ,Ä,-,¾,³,¢□B–â'è,Ì"□¶'O,É□s,Á,½'€□ì,É′□^Ó,µ,Ä□AfGf‰□[,ð□ÄŒ»,µ,Ä,,¾,³,¢□B fefNfjfJJf<fTf|□[fg,É,Â,¢,Ä,Í□u<u>fefNfjfJf<fTf|□[fg</u>□v,ðŽQ□Æ,µ,Ä,,¾,³,¢□B

# Cumulus Browser $\underline{,\hat{,}\P, \beta, \hat{,}}$ $\underline{S}^{-} \{ \cdot \in \square \}$ $\underline{S}^{-} \{ \cdot \in \square \}$ $f \underline{\cap} f \square f \bigcirc \cdot \hat{u} - @$ $f \underline{\oplus} f \square f \square f \bigcirc \cdot \hat{u} - @$ $f \underline{\oplus} f \square f \square f \bigcirc \cdot \hat{u} - @$ $f \underline{\oplus} f \square f \square f \bigcirc \cdot \hat{u} - @$ $f \underline{\oplus} f \square f \square f \land \hat{u} \rightarrow \hat{u} \rightarrow \hat{u} \rightarrow \hat{u}$ $\underline{G}^{\underline{\nabla}} \square \tilde{D}$ $f \underline{H} \tilde{S} f \widehat{\Psi} f \underline{f} \langle , \hat{l} \tilde{S} \bigcirc - \square$ $f \underline{G} f \widehat{\Psi} \square f \widehat{S} \land \hat{u} \rightarrow \hat{u} \rightarrow \hat{u}$ $f \underline{G} f \widehat{\Psi} \square f \land \hat{u} \rightarrow \hat{u} \rightarrow \hat{u} \rightarrow \hat{u}$

#### –pŒê<u></u>||W

# 

\*.

<u>\*.cce</u>

<u>\*.ccf</u>

<u>\*.cqe</u>

<u>\*.cre</u>

#### fAf<ftf@fxfbfg

Cumulus Browser

Cumulus Internet Media Server

Cumulus Network

Cumulus NetworkŠÇ—[]ŽÒf}fjf...fAf<

Cumulus Server

CumulusfAfvfŠfP[[fVf‡f"fEfBf"fhfE

<u>CumulusfJf^f[f0ftf@fCf<</u>

CumulusfJfefSfŠftf@fCf<

<u>CumulusŒŸ∏õfNfGfŠftf@fCf<</u>

<u>Cumulus,ÌŠÇ—∏ŽÒ</u>

Cumulusf@fR[[fhftf@fCf<

<u>[fAfvfŠfP□[fVf‡f"□Ý'è]f\_fCfAf□fOf{fbfNfX</u>

fAfvfŠfP□[fVf‡f"fvf□fOf‰f~f"fOfCf"f^ftfF□[fX(API)

fCf"f^\_[[flfbfg]Ef]][[f<fT][fo

,©∏s

[f]f^f\_f0\_EfIfvfVf‡f"]f\_fCfAf\_f0f{fbfNfX

<u>fJf^f⊡fO</u>

<u>fJf^f∏fO,∙,é</u>

<u>fJf^f∏fOfEfBf"fhfE</u>

<u>fJfefSfŠ</u>

<u>fJfefSfŠftf@fCf<</u>

<u>fJfefSfŠfŠfXfgfEfBf"fhfE</u>

<u>‰ð'œ"x</u>

<u>ŠÈ^ÕŒŸ∏õ</u>

fMfKfofCfg(GB)

<u>fLf⊓fofCfq(KB)</u>

fNf‰fCfAf"fg

fNf‰fCfAf"fg/fT□[fofA□[fLfefNf`ff

<u>ŒŸ</u><u>⊡õfNfGfŠfo</u><u></u>[ <u>ŒŸ∏õfNfGfŠftf@fCf</u>< <u>ŒŸ∏õfc∏[f<fo∏[</u> ,³[]S <u>fTf€flfCf<</u> [<u> Ú</u> × ]fEfBf"fhfE <u>fXfNfŠfvfg</u> <u>fXfe∏[f^fX</u> <u>fXfe∏[f^fXfo∏[</u> ,½[]S <u>fc∏[f<fo∏[</u> <u>fc□[f<f`fbfv</u> fffWf^f<ftf@fCf< <u>fhf‰fbfO&fhf∏fbfv</u> ,Í∏s fpfX/fpfX-<sup>1</sup>/<sub>4</sub> ftf@fCf< ftf@fCf<ftfBf<f^ ftf@fCf<fŠftf@fŒf"fX <u>fu⊓[f<</u> <u>fuf‰fEfU</u> <u>fvfŒfrf...</u>∏[ •;<u>∏</u>‡ŒŸ∏õ <u>flfbfvfAfbfvf⊓fif...</u>□[ ,Ü∏s <u>f∏fKfofCfg(MB)</u> <u>f⊡fffBfAftf@fCf</u>< <u>f□fjf...</u>[[fo□[ ,ç∏s [f@fR\_][fh\_Efvf\_fpfefB]f\_fCfAf\_f0f{fbfNfX <u>fŒfR□[fh</u> <u>fŒfR□[fhfEfBf"fhfE</u> <u>fŒfR∏[fhftf@fCf<</u>

#### \*.cce

'¼,ÌfJf^f□fO,Ü,½,ÍfAfvfŠfP□[fVf‡f",Ö,Ì□AfJfefSfŠ□î•ñ,Ì□',«□o,μ,Ü,½,Í"Ç,Ý□ž,Ý,Ì□Û,ÉCumulus,ª□ ì□¬,∙,é□ACumulusfJfefSfŠftf@fCf‹Œ`Ž®□B

#### \*.ccf

fJf^f□fO,³,ê,½fffWf^f‹ftf@fCf‹□i,Ü,½,ĺflfŠfWfif‹ftf@fCf‹□j,ðŠÇ— □,·,é,½,ß,ÉCumulus,ª□ì□¬,·,é□ACumulusfJf^f□fOftf@fCf‹Œ`Ž®□B

#### \*.cqe

'¼,ÌfJf^f□fO,Ü,½,ÍfAfvfŠfP□[fVf‡f",Ö,Ì□A•Û'¶,³,ê,½ŒŸ□õfNfGfŠ□î•ñ,Ì□',«□o,μ,Ü,½,Í"Ç,Ý□ž,Ý,Ì □Û,ÉCumulus,ª□ì□¬,·,é□ACumulusŒŸ□õfNfGfŠftf@fCf‹Œ`Ž®□B

#### \*.cre

'¼,ÌfJf^f□fO,Ü,½,ÍfAfvfŠfP□[fVf‡f",Ö,Ì□AfŒfR□[fh□î∙ñ,Ì□',«□o,µ,Ü,½,Í"Ç,Ý□ž,Ý,Ì□Û,ÉCumulus, ª□ì□¬,·,é□ACumulusfŒfR□[fhftf@fCf‹Œ`Ž®□B

# [fAfvfŠfP[[fVf‡f"[]Ý'è]fEfBf"fhfE

^ê"Ê"I,Èfvf⊡fOf‰f€,Ì"®□Ì,ð•Ï□X,¨,æ,Ñ□Ý'è,·,é,±,Æ,ª,Å,«,éfEfBf"fhfE□B

# fAfvfŠfP[[fVf‡f"fvf[f0f%f~f"f0fCf"f^ftfF][fX(API)

fvf⊡fOf‰f~f"fO,Ì"®□ì,ð•Ï□X,·,é,½,ß,̉"Šu□§Œä□Bfvf⊡fOf‰f€,Ì‹@"\,ðŠg'£,·,é'ljÁfvf⊡fOf ‰f€□B

#### ftf@fCf<

fvf□fWfFfNfg,ÅŽg—p,³,ê,é,·,×,Ä,ÌŽí—Þ,ÌfffWf^f‹ftf@fCf‹(fOf ‰ftfBfbfN□Afy□[fWfŒfCfAfEfg□AfvfŒf[f"fe□[fVf‡f"□AfTfEf"fh□Afrfffl,È,Ç,Ìftf@fCf‹),ðަ,·^ê"Ê —pŒê□B<u>fffWf^f‹ftf@fCf‹</u>,Ì□€,àŽQ□Æ□B

#### fu[[f<

\_\_\_\_\_\_ □^,Ü,½,ĺ‹U,Ì'l,ÉŠî,Ã,˜\_\_\_□fVfXfef€□BCumulus,Å,ĺ□A˜\_\_\_□‰ ‰ŽZŽq,Ì",©,Â",¨,æ,Ňّ",Ü,½,ĺ",ðŽg—p,μ,Ӓ□AŒŸ□õ□ðŒ□,ðŒ‹□‡,μ,Ü,·□B

#### Browser

<u>Cumulus Browser</u>,Ì[]€ŽQ[]Æ[]B
### fJf^f⊡fO

fJf^f□fO,μ,½ftf@fCf‹,ðŠÇ—□,·,é,½,ß,ÉCumulus,ª□ì□¬,·,é□A.ccf,Æ,¢ ,¤Šg′£Žq,Ìftf@fCf‹]B<u>ftf@fCf‹</u>,Ì□€,¨,æ,Ñ<u>CumulusfJf^f□f0ftf@fCf‹</u>,Ì□€,àŽQ□Æ□B

## fJf^f⊡fO,∙,é

<u>ftf@fCf</u><,ðfJf^f□fO,É,·,éŽÀ□Û,Ì'€□Ì□Bftf@fCf<,Ì□€,àŽQ□Æ□B

## [f]f^f\_f0fIfvfVf‡f"]f\_fCfAf\_f0f{fbfNfX

Cumulus,<sup>a</sup><u>ftf@fCf</u><,ðfJf^f[]fO,·,é•û-@,ðŽw'è,·,é,½,ß,Ì"Á•Ê,Èf\_fCfAf[]fOf{fbfNfX[]B

#### fJf^f□fOfEfBf"fhfE

fJf^f□fOŽž,É'†□S"I,Èf†□[fUfCf"f^ftfF□[fX,Æ,μ,Ä<@"\,·,é2,Â,Ì•"•<sup>a</sup>(<u>fJfefSfŠfŠfXfgfEfBf"fhfE</u> ,Æ<u>fJf^f□fOfEfBf"fhfE</u>),Å□\□¬,³,ê,éfEfBf"fhfE□BfJfefSfŠfŠfXfgfEfBf"fhfE,Ì□€ ,¨,æ,ÑfJJ^f□fOfEfBf"fhfE,Ì□€,àŽQ□Æ□B

## fJfefSfŠ

Cumulus,ÌfJf^f□fO,ð□®—□,·,é□Û,Ì"y'ä,Æ,µ,Ä‹@"\,µ,Ü,·□B

## fJfefSfŠftf@fCf‹

<u>fJfefSfŠftf@fCf<,Ì</u>∏€ŽQ∏Æ∏B

### fJfefSfŠfŠfXfgfEfBf"fhfE

 $\label{eq:cumulusf} CumulusfJf^f[]fO+O[]¬,ISi"O,Æ,È,é[]if]fefSfŠ,ÆŒÄ,Î,ê,é[]j+O[]¬,³,ê,½fŒfR[][fhfOf<[][fv,ð+]Ž\,,é[]Af]f^f[]fOfEfBf"fhfE,I]]¶'¤,É, ,é[]fefSfŠfŠfXfgfEfBf"fhfE[]B$ 

### fNf‰fCfAf"fg

fT\_[fofAfvfŠfP[[fVf‡f"(CumulusfT[[fo,È,Ç),Éflfbfgf]][fN@o—R,ÅfAfNfZfX,·,éft[[fU[B

#### fNf‰fCfAf"fg/fT□[fofA□[fLfefNf`ff

ft[][fU(fNf‰fCfAf"fg,Æ,à,¢,¢,Ü,·),ªflfbfgf[][[fNŒo—R,ÅfT[][fofAfvfŠfP[][fVf‡f",ÉfAfNfZfX,·,éf\ ftfgfEfFfA[]\[]¬[]B

# ∙i□‡ŒŸ□õ

∙¡[]",ÌŒŸ[]õ[]ðŒ[],Å[]\[]¬,³,ê,錟[]õfNfGfŠ[]B

### Cumulus,ÌŠÇ—∏ŽÒ

CumulusfJf<sup>^</sup>f□fO,Ì□\□¬,ÆŠÇ—□,Ì□Ó"CŽÒ□BŠÇ—□ŽÒ,Í□ACumulusfT□[fo,É□Ú'±,μ,Ä,¢ ,éf†□[fU,Ì,½,ß,Ì ‰~ŠŠ,ÈfJf^f□fO"®□ì,Ì^ÛŽ□□AfJf^f□fO,ÌfofbfNfAfbfv□A,¨,æ,Ñ,»,Ì'¼,Ìf^fXfN,ð'S"-,μ,Ü,·□B

### CumulusfAfvfŠfP[[fVf‡f"fEfBf"fhfE

,·,×,Ä,Ìfvf□fOf‰f€fRf}f"fh,¨,æ,ÑflfvfVf‡f",Æ□Aftf@fCf‹,ÌfJf^f□fO□AfJfefSfŠ□Ý'è□AŠÇ— □,ð□s,¤,½,ß,É∙K—v,È□uŽq□vfEfBf"fhfE,ªŠÜ,Ü,ê,é□ACumulus,Ìf□fCf"fEfBf"fhfE□B

#### **Cumulus Browser**

Cumulus Browser,ĺ□AŽg—p—¿,ª-³—¿,ÌfAfvfŠfP□[fVf‡f",Å,·□B,±,ê,ðŽg—p,µ,Ä□ACD-ROM,âfŠf€□[fofuf<f□fffBfA(Syquest□AJaz□AZip□AMO,È,Ç,ÌfJ□[fgfŠfbfW) ,É,æ,èfJf^f□fO,ð"z•z,·,é,±,Æ,ª,Å,«,Ü,·□B

#### CumulusfJf^f[]fOftf@fCf<

fJf^f□fO,μ,½<u>fffWf^f<ftf@fCf<(ftf@fCf<</u>),ðŠÇ—□,·,é,½,ß,ÉCumulus,ªŽg p,·,é□AŠg'£Žq,ª.ccf,Ì"Á•Ê,Èftf@fCf<⊡B

## CumulusfJfefSfŠftf@fCf<

fJfefSfŠ[]î•ñ,ð[]',«[]o,·[]Û,ÉCumulus,ªŽg—p,∙,é[]AŠg'£Žq,ª.cce,Ì"Á•Ê,Èftf@fCf<[]B

#### CIMS

flfŠfWfif<ftf@fCf<,ðfCf"f^[[flfbfg[]ã,ÅŒöŠJ[]E"z•z,·,é,½,ß,É[]ÝŒv,³,ê,½[]A< ĺ,ÈCGl(<¤´ÊfQ[[fgfEfFfCfCf"f^ftfF[][fX)fAfvfŠfP[][fVf‡f"[]B

#### **Cumulus Network**

fNf‰fCfAf"fg/fT□[foŠÂ‹«,Å<u>fffWf^f‹ftf@fCf‹</u>,ð□®—□□EŠÇ—□,·,é,Ì,É•s‰ÂŒ‡,È□Af□fffBfAŠÇ —□fVfXfef€□BfffWf^f‹ftf@fCf‹,Ì□€,¨,æ,Ñ<u>fNf‰fCfAf"fg/fT□[fofA□[fLfefNf`ff</u>,Ì□€,àŽQ□Æ□B

# Cumulus NetworkŠÇ—[]ŽÒf}fjf...fAf<

CumulusŠÇ—[]ŽÒ,Ìʻ€[]ìŽè[]‡,Æ‹@"\,ð‰ð[]à,∙,éf}fjf...fAf‹[]B

## CumulusŒŸ∐õfNfGfŠftf@fCf<

•Û'¶,μ,½ŒŸ[]õfNfGfŠ[]î•ñ,õ[]',«[]o,·[]Û,ÉCumulus,ª[]ì[]¬,·,é[]AŠg'£Žq,ª.cqe,Ìftf@fCf<[]B

## CumulusfŒfR[[fhftf@fCf<

fŒfR□[fh□î•ñ,ð□',«□o,·□Û,ÉCumulus,ª□ì□¬,·,é□AŠg'£Žq,ª.cre,Ìftf@fCf<□B

## **Cumulus Server**

Cumulus Serverf\ftfgfEfFfA,ªfCf"fXfg[[f<,³,ê]ACumulusfJf^f[fO,ª[í'",·,éfRf"fsf...[[f^]B

#### [[]Ú]×]fEfBf"fhfE

f†[[fU,<sup>a</sup>fJ][[f\f<,ðfTf€flfCf<[]ã,É^Ú" ®, $\mu$ ,½,Æ,«,É•\ަ,³,ê,é[]¬,³,ÈfEfBf"fhfE(fŒfR[][fh-¼[]Aftf@fCf<Œ`Ž®[]A‰æ'œf,[][fh[]A‰ð'œ"x[]A[]C[]<sup>3</sup>"ú,ðަ, $\mu$ ,Ü,·)[]B<u>fJf^f[]fOfEfBf"fhfE</u>,Ì[]€, ,¨,æ,Ñ<u>fTf€flfCf<</u>,Ì[]€,àŽQ[]Æ]B

### fffWf^f<ftf@fCf<

fvf[]fWfFfNfg,ÅŽg—p,³,ê,é"dŽqftf@fCf<(fOf ‰ftfBfbfN[]Afy[][fWfŒfCfAfEfg[]AfvfŒf[f"fe]][fVf‡f"[]AfTfEf"fh[]Afrffflftf@fCf<,È,Ç)[]B

### fhf‰fbfO&fhf⊡fbfv

f}fEfX,Åfhf‰fbfO,μ,Ä'Î□Û,Éfhf□fbfv,∙,é,± ,Æ,Å□Aft□[fUfCf"f^ftfF□[fX,ÌflfufWfFfNfg,ð^Ú"®,∙,é∙û–@□B

#### ftf@fCf<ftfBf<f^

fJf^f[]fOŽž,É[]Aftf@fCf<,ÉŠÖ,·,é[]î•ñ,ðŽæ"¾,·,é,½,ß,ÉCumulus,ªŽg—p,·,éf\ ftfgfEfFfAft[][fefBfŠfefB[]B"üŽè‰Â"\ ,È[]Å[]V,Ìftf@fCf<ftfBf<f^,Ì[]î•ñ,Í[]ACanto,ÌWebfTfCfg(www.canto-software.com),ðŽQ[]Æ,μ,Ä,-,¾,³,¢[]B

## ftf@fCf‹fŠftf@fŒf"fX

Cumulus,ÌfJf^f□fO,ÅŠÇ—□,μ,Ä,¢,éftf@fCf‹,ÌŽÀ□Û,Ì□ê□Š,ð'Ç□Õ,·,é,½,ß,ÌŽd'g,Ý□B

## ŒŸ<u></u>]õfc□[f<fo][

ŒŸ[]õ[]ðŒ[],É^ê'v,·,éfŒfR[[[fh,ðf]]f^f[]fO,ÅŒŸ[]õ,·,é,±,Æ,ª,Å,«,éCumulus,Ìfc[[f<]B

### fMfKfofCfg(GB)

"dŽq<L‰<sup>−</sup>'•'u,Ì—e—Ê,Ì'P^Ê[]B1 GB,Í[]A1,024f[]fKfofCfg,Ü,½,Í– ñ10.8'›fofCfg,É,È,è,Ü,·[]BCumulus,ÌfJf^f[]fOftf@fCf‹,Ì'å,«,³,Í[]A[]Å'å,Å2 GB,Å,·[]B

### Internet Media Server

<u>CIMS</u>,Ì<u>∏</u>€ŽQ∏Æ<u></u>]B

## fLf[]fofCfg(KB)

"dŽq<L‰<sup>−</sup>'•'u,Ì—e—Ê,Ì'P^Ê□B1 KB,Í□A1,024fofCfg,É,È,è,Ü,·□B

#### f[]fffBfAftf@fCf<

fvf□fWfFfNfg,ÅŽg—p,³,ê,é"dŽqftf@fCf<,Ü,½,ĺfffWf^f<ftf@fCf<(fOf ‰ftfBfbfN□Afy□[fWfŒfCfAfEfg□AfvfŒf[f"fe□[fVf‡f"□AfTfEf"fh□Afrffflftf@fCf<,È,Ç)□B<u>fffWf^f<f</u> <u>tf@fCf<</u>,Ì□€,àŽQ□Æ□B

### f⊡fKfofCfg(MB)

"dŽq<L‰<sup>-</sup>'•'u,Ì—e—Ê,Ì'P^Ê□B1 MB,Í□A1,024fLf□fofCfg,Ü,½,Í1,048,576fofCfg,É,È,è,Ü,·□B

f[]fjf...[[fo[[

<u>Cumulus,ÌfAfvfŠfP□[fVf‡f"fEfBf"fhfE</u>,Ì□ã•",É•\ަ,³,ê,Ü,·□Bf□fjf…□[fo□[,É,Í□A,·,×,Ä,Ìfvf□fOf ‰f€fRf}f"fh,ðŠÜ,Þf□fjf…□[,ª•\ަ,³,ê,Ü,·□B

#### fpfX/fpfX-¼

fRf"fsf…□[f^,Ìfn□[fhfffBfXfNfhf‰fCfu,Ü,½,ÍfŠf€□[fofuf‹f□fffBfA(CD-ROM,â□ASyquest□AZip□AJaz□AMO,È,Ç,ÌfJ□[fgfŠfbfW),ɕۑ¶,³,ê,Ä,¢,éftf@fCf‹,Ì□ê□Š,ð•\ ,μ,Ü,·□B

#### f|fbfvfAfbfvf□fjf...□[

 $f]\Box[f < , \delta f] f u f W f F f N f g \Box \tilde{a}, \acute{E}^{U'' \otimes , \mu, \ddot{A} & Ef} f E f X f { f^{f'', \delta f N f \check{S} f b f N, \cdot, \acute{e}, \mathcal{A} \bullet } \\ \check{Z}_{l, 3}, \acute{e}, \acute{e} f V f \ddagger \Box [f g f] f b f g f \Box f j f ... \Box [\Box B$ 

### fvfŒfrf...□[

frffflfNfŠfbfv□AfTfEf"fhftf@fCf<□AfCf□□[fWftf@fCf<,È,Ç,Ì□AfJf^f□fO,μ,½ftf@fCf<,ð′²,×,é,± ,Æ,ª,Å,«,é"Á∙Ê,Èfvf□fOf‰f€f,□[fh□B
## ŒŸ**□õfNfGfŠfo**□[

ŒŸ∏õfNfGfŠ,ð∏Ä—~—p,Å,«,é,æ,¤,É∙Û'¶,µ,Ü,·∏B

## ŒŸ**□õfNfGf**Šftf@fCf<

<u>ŒŸ∏õfNfGfŠftf@fCf<</u>,Ì**∏€ŽQ**∏Æ∏B

#### fŒfR[[fh

ftf@fCf‹,ðfJf^f[]fO,É'Ç ‰Á,µ,½[]Û,ÉCumulus,ª[]ì[]¬,·,éfJf^f[]fO,ÌfGf"fgfŠ[]BfŒfR[][fh,É,Í[]Aftf@fCf‹-¼[]Aftf@fCf‹,Ì[]ê[]Š[]Aftf@fCf‹Œ`Ž®[]A‰ð'œ"x,È,Ç[]Aftf@fCf‹,ÉŠÖ,·,錟[]õ‰Â"\,È[]d v[]î•ñ,ª•Û'¶,³,ê,Ä,¢,Ü,·[]B

#### fŒfR[[fhftf@fCf<

 $Cumulus, {}^{a}f \\ \oplus f \\ R \\ [[fh ] \hat{i} \\ \hat{n}, \hat{o}' \\ 4, \hat{i} \\ f \\ f \\ 0, \hat{U}, \frac{1}{2}, \hat{i} \\ f \\ 0, \hat{U}, \frac{1}{2}, \hat{i} \\ 0, \hat{U}$ 

#### fŒfR[[fhfEfBf"fhfE

fJf^f□fOfEfBf"fhfE,̉E'¤,É, ,é∙"•ª□BfŒfR□[fhfEfBf"fhfE,É,Í□AfŒfR□[fh,ªfTf€flfCf<,Ü,½,ĺfefLf Xfg,Æ,μ,Ä•\ަ,³,ê,Ü,·□B<u>fŒfR□[fh</u>,Ì□€,¨,æ,Ñ<u>fTf€flfCf<</u>,Ì□€,àŽQ□Æ□B

#### [f@fR][fhfvf]fpfefB]fEfBf"fhfE

fJf^f□fO,μ,½ftf@fCf<,ÉŠÖ,∙,é□d—v,ÈfŒfR□[fh□î•ñ,ð•\ަ,∙,é"Á•Ê,ÈfEfBf"fhfE□B<u>fŒfR□[fh</u>,Ì□€ ,àŽQ□Æ

#### ‰ð'œ"x

,·,×,Ä,ÌfOf‰ftfBfbfNftf@fCf‹Œ`Ž®,Å,Ì□A1fCf"f`, ,½,è,ÌfsfNfZf‹□"□Bftf@fCf‹,̉ð'œ"x,ª□,,¢ ,Ù,Ç□A1fCf"f`, ,½,è,ÌfsfNfZf‹□",à'½,,È,è,Ü,·□B'Ê□í,Í□Aftf@fCf‹,̉ð'œ"x,ª□,,¢,Ù,Ç□A□ì‹Æ,É∙K —v,Èf□f,fŠ,¨,æ,Ñfn□[fhfffBfXfN,Ì—e—Ê,à'å,«,,È,è,Ü,·□B

#### fXfNfŠfvfg

Macintosh,Ü,½,İMacintosh,Ɍ݊·[]«,Ì, ,éfRf"fsf...[[f^,ÅŽÀ]]s,³,ê,é[]A-½ ß,ÌfŠfXfg[]BCumulus Network 4 Macintosh Client,Å,Í[]AfXfNfŠfvfg,ðŽg p,μ,Ä[]A•¡ŽG,È[]ì<Æ,ðŽ©"®"I,É[]s,¢,Ü,·[]B,Ü,½[]A[]L<`,Ì^Ó-¡,Å[]AŽ©"®[]^—[],ð[]s,¤f,fWf... [][f<,Ì,±,Æ,ðŒ¾,¢,Ü,·[]B

## ŠÈ^ÕŒŸ**∏õ**

1,Â,ÌŒŸ□õ□ðŒ□,Å□\□¬,³,ê,錟□õfNfGfŠ□B

#### fXfe[[f^fX

"Á'è,Ìftf@fCf<,Ì□ó'Ô,ð□à-¾,∙,é,½,ß,Éf†□[fU,ª"o˜^,∙,é□ó'Ô□B

#### fXfe[[f^fXfo[[

fc[][f<f{f^f",Ì[]à-¾[]A[<u>fAfvfŠfP[][fVf‡f"[]Ý'è]fEfBf"fhfE</u>,Ö,ÌfAfNfZfX[]AfJfefSfŠ/ fŒfR[][fh,ÌfXfe[][f^fX,ð•\ަ,·,é[]ACumulusfAfvfŠfP[][fVf‡f"fEfBf"fhfE,̉º•",É, ,éfo[][]B

#### fTf€flfCf<

 $\label{eq:linearconductor} \begin{array}{l} f \underline{\mathbb{C}}_{fR} \\ f \underline{\mathbb{$ 

## fc[[f<fo[[

,æ,Žg—p,·,éfRf}f"fh,ð,·,Î,â,Žg—p,·,é,½,ß,Ìf{f^f",ð'ñ<Ÿ,·,é□A∙W□€,Ìfvf□fOf‰f€fc□[f<□B

#### fc[[f<f`fbfv

 $fJ\Box[f\f <, \delta fc \Box[f\f o \Box[, ]f\f f^{"}, ]\Box a, E^U" \otimes , \cdot, e, AE \bullet \Z |, ^3, e, e \Box Af\f f^{"}, \delta \Box a - ^3/4, \cdot, e \Box \neg, ^3, Eft \Box \Box[f e f Bf"f Of Ef Bf"f hf E \Box B$ 

# fVf‡[[fgfJfbfgfL][

<b>'€</b> [] <b>ì</b> ftf@fCf<,ðfJf^f[]fO,∙,é	<b>fVf‡[[[fgfJfbfgfL[][</b> Ctrl + B
CumulusfT∏[fo,É∏Ú'±,∙,é	Ctrl + Shift + O
[]î•ñ,ðfRfs[][,∙,é	Ctrl + C
fJf^f⊡fO,ð∙Â,¶,é	Ctrl + F4
□î•ñ,ðfJfbfg,∙,é	Ctrl + X
□î•ñ,ð□í□œ,∙,é	Delete
fJf^f⊡fO'†,Ì,∙,×,Ä,ÌfŒfR□[fh,ð∙\ ަ,∙,é	Ctrl + G
ʻl'ð,µ,½fŒfR□[fh,Ìfvf□fpfefB,ð ∙\ަ	Alt + Return
ŒŸ[]õfc[][f‹fo[][,ðŽg— p,µ,ÄŒŸ[]õ,ðŽÀ[]s,∙,é	Ctrl + F
Cumulus,ð∏l—¹,∙,é	Alt + F4
□ó<μ^Ë'¶,Ìfwf <f∨,ð<n"®,∙,é< td=""><td>F1</td></f∨,ð<n"®,∙,é<>	F1
f_fCfAf∏fOf{fbfNfX,Ü,½,ĺfEfBf" fhfE,Å∏AŽŸ,Ìf^fu,É^Ú"®,∙,é	Ctrl + Tab
f_fCfAf∏fOf{fbfNfX,Ü,½,ĺfEfBf" fhfE,Å∏A'O,Ìf^fu,É^Ú"®,∙,é	Ctrl + Shift + Tab
fJfefSfŠ,¨,æ,ÑfŒfR□[fh,ð^Ú"® ,∙,é	Ctrl+−î^ófL□[
[]î∙ñ,ðfy[[fXfg,∙,é	Ctrl + V
ʻl'ð,μ,½ftf@fCf<,ÌfvfŒfrf □[,ð•\ަ,∙,é	Ctrl + Y
'l'ð,μ,½□€–Ú,ð^ó□ü,∙,é	Ctrl + P
fvfŒfrf…□[fEfBf"fhfE,ð□¶,É ‰ñ"],∙,é	Ctrl+[]¶-î^ófL[][
fvfŒfrf…□[fEfBf"fhfE,ð‰E,É ‰ñ"],∙,é	Ctrl+‰E-î^ófL[[
ŒŸ□õfc□[f‹fo□[,©,çfJf^f□fOfEf Bf"fhfE,ÖftfH□[fJfX,ð□Ø,è'Ö,¦	Esc
ʻl'ð,μ,½fŒfR□[ʃh,Ìʃvf□ʃpʃeʃB,ð ∙\ަ,∙,é	Ctrl+I,Ü,½,ÍAlt+Enter
'l'ð,µ,½fJfefSfŠ,É"o˜^,³,ê,Ä,¢ ,éfŒfR□[fh,ð•\ަ,∙,é	Alt+∏ã/‰º−î^ófL∏[
,∙,×,Ä,ÌfJfefSfŠ,Ü,½,ĺfŒfR∏[fh, ð'l'ð,∙,é	Ctrl + A
fJfefSfŠ,Ü,½,ĺfŒfR∏[fh,ð'l'ð/'l' ð‰ð∏œ,∙,é	Ctrl+fXfy[[fXfo[[
•¡[]",ÌfŒfR[][fh,ð'l'ð/'l'ð‰ð[]œ	Ctrl +

	fXfy□[fXfo□[,Ü,½,Í Shift + -î^ófL□[
,∙,×,Ä,ÌfŒfR∏[fh,ð'l'ð	Ctrl + A
fJf^f□fOfEfBf"fhfE,Å□AfJfefSfŠf ŠfXfgfEfBf"fhfE,ÆfŒfR□[fhfEf Bf"fhfE,ð□Ø,è'Ö,¦,é	Shift + Tab, Ctrl + Tab, or Ctrl + Shift + Tab
fvfŒfrf…[[[fEfBf"fhfE,ðŠg'å,∙,é	Ctrl+fvf‰fX <l[]†(+)< td=""></l[]†(+)<>
fvfŒfrf □[fEfBf"fhfE,ð□k□¬,∙,é	Ctrl+f}fCfifX <l[]†(-)< td=""></l[]†(-)<>

# Cumulus,ÌfJfXf^f}fCfY

<u>fAfvfŠfP□[fVf‡f"□Ý'è</u> <u>fJf^f□fOflfvfVf‡f",Ì□Ý'è</u>

## └─Cumulus,ÌfJfXf^f}fCfY fAfvfŠfP□[fVf‡f"□Ý'è,Ì•ï□X

[fAfvfŠfP□[fVf‡f"□Ý'è]f\_fCfAf□fOf{fbfNfX,Å□AŽŸ,Ì,æ,¤,ÈflfvfVf‡f",ð□Ý'è,Å,«,Ü,·□B

- $\label{eq:linear} \begin{array}{l} & \Box E \quad \langle N^{\prime\prime} \, {}^{\otimes} \check{Z} \check{z}, \acute{E} \Box \overset{A}{\to} \check{a}, \acute{E} \check{Z} g p, \mu, \overset{1}{2} f J f^{-} f \Box f O, \delta \Box \overset{A}{\to} \check{S} J, \cdot, \acute{e}, \overset{C}{\otimes}, \check{C}, \varkappa, \overset{C}{\otimes} \end{array}$
- □E Cumulus,ÌfŒfR□[fh•\ަ•û-@□if<u>Tf€flfCf<</u>,©fŠfXfgf,□[fh,©□j
- $\Box E f$ fEfXf\_fuf<fNfŠfbfN,Ì $\Box$ Ý'è
- □E "Á'è,ÌŒx□□,ð•\ަ,·,é,©,μ,È,¢,©
- []E flfvfVftf", Ì•\ Ž\[]i[f@fR[[fhfvf]fpfefB]f\_fCfAf]f0f{fbfNfX, Ì"®[]]A'ª'è'P^Ê[AfEfBf"fhfEfTfCfY•Ï[]XŽž, Ìf0fŠf bfh, ÌŽg—p[AfŠfXfgf,][fhfEfBf"fhfE,ªŽg—p‰Â"\,©"Û,©[]A,È,Ç[]j
- □E ^ê"ÊŒŸ□õ"®□ì

### fAfvfŠfP[[fVf‡f"[]Ý'è,ðŽQ[]Æ,Ü,½,Í•Ï[]X,·,é,É,Í

- 2.  $f^fu,\delta_0\phi,\dot{e},\dot{o},\dot{e},\dot{e},\dot{e},\dot{f}_af^fu,\dot{f}_fCfgf<,\delta_fNfSfbfN,\mu,\dot{U},\cdot_B$

^	ê'	Έ
_		_

•\ަ

ŒŸ∏õ

 f}fEfX,ðŽg,Á,Ä'l'ð,μ□A["K—p],ðfNfŠfbfN,μ,Ä,,¾,³,¢□B,·,×,Ä,Ì'l'ð,ð— Lο,É,μ,½□ó'Ô,Åf\_fCfAf□fOf{fbfNfX,ð•Â,¶,é,É,Í□A[OK],ðfNfŠfbfN,μ,Ä,-,¾,³,¢□BfLfff"fZf<,·,é,É,Í[fLfff"fZf<],ðfNfŠfbfN,μ,Ä,,¾,³,¢</li>

{button ,AL(`customizing',0,`',`')} <u>ŠÖ~A⊡€–Ú</u>

## **└─Cumulus,ÌfJfXf^f}fCfY** └─fAfvfŠfP□[fVf‡f"□Ý'è,Ì•Ï□X [^ê"Ê]f^fu

[^ê"Ê]f^fu,Í□A^ê"Ê"I,Èfvf□fOf‰f€"®□ì,ð□§Œä,µ,Ü,·□B

flfvfVf‡f" -Ú"l

1+1 • 1 • 1+1	
<n"®žž⊡afjf^f⊡f O,ðŠJ,</n"®žž⊡afjf^f⊡f 	'O‰ñ囗l—¹Žž,ÉŠJ,¢,Ä,¢,½囗A,Ü,½,ĺ囗Ú'± ,μ,Ä,¢ ,½ƒJƒ^ƒ❑ƒO,ð❑A <n"®žž,éž©"®"i,é❑äšj, μ,Ü,·❑B</n"®žž,éž©"®"i,é❑äšj, 
ſJſ^ſ⊡O,ðŠJ,	fJf^f□fO,ðŠJ,¢ ,½,Æ,«,Ì <u>fŒfR□[fhfEfBf"fhfE</u> ,Ì•\ ަ,ðŒ^'è,µ,Ü,·□B[fJf^f□fO,ðŠJ,]flfvfVf‡f", ðʻl'ð,·,é,Æ□A□V <k,éšj,¢,½fjf^f□fo,ì•\ ަ,¾,<sup>-</sup>,ª•ï□X,³,ê,Ü,·□BŒ»□݉æ-Ê□ã,É, ,éfJf^f□fO,Ì•\ަ,ð•ï□X,·,é,É,Í□A•\ަf□fjf □[,©,çŠó-],Ì•\ ަ,ðʻl'ð,µ,Ü,·□BŽŸ,ÌflfvfVf‡f",ªŽg— p,Å,«,Ü,·□B</k,éšj,¢,½fjf^f□fo,ì•\ 
	□E [•Â,¶,ç,ê,½,Æ,«,Ì□ó'Ô] ,ð'l'ð,∙,é,Æ□AfJf^f□fO,ª□ÅŒã,É•Â,¶,ç,ê, ½,Æ,«,Ì□ó'Ô,ÅfŒfR□[fh,ª∙\ަ,³,ê,Ü,·□B
	[E [fŠfXfgf,[[fh] ,ð'l'ð,∙,é,Æ[]AfŒfR[[fh-¼[]AŒ`Ž®[]A ‰æ'œf,[[fh[]A ‰ð'œ"x[]A,¨,æ,Ñ[]C[]³"ú,ªfŠfXfg,³,ê,½∙\ Œ`Ž®,ÅfŒfR[[fh,ª•\ަ,³,ê,Ü,∙[]B
	□E [fTf€flfCf <f,□[fh] ,ð'l'ð,∙,é,Æ□AfŒfR□[fh,ĺfOf ‰ftfBfbfNfTf€flfCf&lt;,Å•\ަ,³,ê,Ü,∙□B</f,□[fh] 
	□E [ŠÇ—□ŽÒf,□[fh] ,ð'l'ð,∙,é,Æ□AfJf^f□fO"®□Ì□ó<μ,ðŠÄŽ<,∙, éŠÇ—□ŽÒfEfBf"fhfE,ªŠJ,«,Ü,∙□B
fŒfR□[fh,Ìf_fuf‹f NfŠfbfNŽž	fŒfR[][fh,ðf_fuf‹fNfŠfbfN,µ,½,Æ,«ŠJ,- fEfBf"fhfE,ÌŽí— Þ,ðŒ^'è,µ,Ü,·[]BŽŸ,ÌflfvfVf‡f",ªŽg— p,Å,«,Ü,·[]B
	[E [fvf□fpfefB,ð•\ަ] ,ð'l'ð,·,é,Æ[]A[ <u>fŒfR][fhfvf□fpfefB]f_fCfAf</u> <u>[fOf{fbfNfX</u> ,ªŠJ,«,Ü,·]B[E [fvfŒfrf [[,ð•\ަ] ,ð'l'ð,·,é,Æ[]Af]f^f□fO,³,ê,½flfŠfWfif<,Ì <u>fvf</u> <u>Œfrf</u> [],ª•\ަ,³,ê,Ü,·]B
Œx <u>□□</u> f_fCfAf <u></u> ]fO	"Á'è,ÌŒx∏□f_fCfAf□fOf{fbfNfX,ð•\ ަ,∙,é,©"Û,©,ð□§Œä,µ,Ü,∙□BŽŸ,ÌflfvfVf‡f ",ªŽg—p,Å,«,Ü,∙□B
	□E   [Œx□□,ð•\ަ] ,ð'l'ð,·,é,Æ□A,·,×,Ä,ÌŒx□□,ª•\ ަ,³,ê,Ü,·□B

□E [Œx□□,ð•\ަ,µ,È,¢] ,ð'l'ð,∙,é,Æ□A"Á'è,ÌŒx□□,ª•\ ަ,³,ê,Ü,¹,ñ□B

{button ,AL(`preferences',0,`',`')} <u>ŠÖ~A□€–Ú</u>

# <sup></sup> Cumulus,ÌfJfXf^f}fCfY [fAfvfŠfP□[fVf‡f"□Ý'è,Ì•ï□X [•\ަ]f^fu

[•\ަ]f^fu,ĺ[]AfJf^f[]fO,ÆfŒfR[][fh,Ì•\ަ,¨,æ,Ñ'ª'è•û– @[]A,È,ç,Ñ,É<u>[fŒfR[][fhfvf[]fpfefB]f\_fCfAf[]fOf{fbfNfX</u>,Ì"®[]Ì•û–@,ð[]§Œä,µ,Ü,·[]B

#### flfvfVf‡f"/ftfB[[f<fh -Ú"l

fTf€flfCf‹f,[[[fh	fŒfR□[fh–¼,ðfTf€flfCf <f,□[fh,å•\< th=""></f,□[fh,å•\<>
	ަ,∙,é,©∏A,Ü,½,ĺfJ∏[f∖
	f<,ðfTf€flfCf<∏ã,É'u,¢
	,½,Æ,«,ÉfŠfXfgf,□[fhfEfBf"fhfE,ð•\
	ަ,∙,é,©,Ç,¤,©,ðŒ^'è,µ,Ü,∙∏B

fvfŒfrf...□[fTfCfY fvfŒfrf... □[fEfBf"fhfE,ÌfTfCfY,ð□§Œä,μ,Ü,·□BŽ Ÿ,ÌflfvfVf‡f",ªŽg—p,Å,«,Ü,·□B

 $\label{eq:linear_state} \begin{array}{ll} & & [flf \tilde{S} fW fif \langle fT f C fY] \\ , \delta' l' \delta, \cdot, \acute{e}, \pounds \Box A f] f \ f \Box f O, ^3, \acute{e}, \frac{1}{2} flf \tilde{S} fW fif \langle, \\ l \tilde{Z} A \Box \hat{U}, l fT f C fY, A fv f \pounds fr f... \Box [, ^a \cdot \ \tilde{Z} |, ^3, \acute{e}, \ddot{U}, \cdot \Box B \end{array}$ 

□E [f□fCf"fEfBf"fhfE,É□‡,í,¹,é] ,ð'l'ð, ,é,Æ□ACumulusfAfvfŠfP□[fVf‡f "fEfBf"fhfE,É□‡,í,¹,ÄfvfŒfrf... □[,ÌfTfCfY,ª•ï□X,³,ê,Ü,.□B

 $\begin{array}{ll} & & [, *, \dot{i}'\frac{1}{4}], \dot{\delta}'i'\dot{\delta}, \cdot, \acute{e}, \pounds \Box A \bullet \\ & \check{Z}_{|, ^{3}}, \dot{e}, \acute{e}ftfB \Box [f < fh, \acute{E} \check{S} \acute{o} - ], \dot{f} v f \pounds frf... \\ & & \Box [fTfCfY, \check{\delta}'' \ddot{u} - \dot{I}, \mathring{A}, «, \ddot{U}, \cdot \Box B \end{array}$ 

'P^Ê□Ý'è [fŒfR□[fhfvf□fpfefB]f\_fCfAf□fOf{fbfN fX,É•\ Ž|,³,ê,é'ª'è'P^Ê□ifCf"f`□AfZf"f`f□□[fg f<,È,Ç□j,ðŒ^'è,µ,Ü,·□B</p>

[fŒfR□[fhfvf□fpfefB]f □í,É[fŒfR□[fhfvf□fpfefB]f\_fCfAf□fOf{f \_fCfAf□fOf{fbfNfX□A bfNfX,ð,·,×,Ä,ÌCumulusfEfBf"fhfE,Ì^ê □í,É^ê"ÔŽè'O,É•\ަ "ÔŽè'O,É•\ަ,μ,Ü,·□B

fJf^f[]fOfEfBf"fhfE[]Af —]"',ð[]Å[]¬‰»,·,é,æ,¤ TfCfY•Ï[]X,ÉfOfŠfbfh, ,É<u>fŒfR[][fhfEfBf"fhfE</u> ðŽg,¤ ,ðŽ©"®"I,ÉfTfCfY•Ï[]X,μ,Ü,·[]B

{button ,AL(`preferences',0,`',`')} <u>ŠÖ~A□€-Ú</u>

#### <sup>IIII</sup> Cumulus,ÌfJfXf^f}fCfY <sup>III</sup>fAfvfŠfP□[fVf‡f"□Ý'è,Ì•Ï□X [ŒŸ□õ]f^fu

$$\label{eq:constraint} \begin{split} & [ {\Bar{C}} \Bar{C$$

fJfefSfŠ,ðfNfŠfbfN,µ,ÄfŒfR□[fh,ð•\

ަ,·,é,Æ□ĂŒŸŪõ,ªŽÀŪs,³,êŪĂ,»,ÌfJfefSfŠ"à,Ì,·,×,Ä,ÌfŒfR□[fh,ªŒŸ□õ,³,ê,Ü,·□BfJfefSfŠŒŸ□õ,Ì□Ú□ ×,Í[<u>fJfefSfŠŒŸ□õ□Ý'è,ð—□‰ð,·,é</u>],ðŽQ□Æ,µ,Ä,,¾,³,¢□B

[fJfefSfŠŒŸ□õ],ÅŽŸ,Ì,¢, , ,ê,©,ÌŒŸ□õ•û-@,ð'l'ð,Å,«,Ü,·□B

['I'ð,<sup>3</sup>,ê,<sup>1</sup>/<sub>2</sub>f]fefSfŠ,Ì,¢, ,,ê,©,ÉŠY"-,·,é] ,ð'I'ð,·,é,Æ[]Af]fefSfŠfŠfXfgfEfBf"fhfE,Å'I'ð,<sup>3</sup>,ê,<sup>1</sup>/<sub>2</sub>fJfefSfŠ,Ì,¢ ,,,ê,©,ÉŠÖ~A,·,éfŒfR[[fh,<sup>a</sup>ŒŸ[]õ,<sup>3</sup>,ê,Ü,·[]B

□E ['I'ð,³,ê,½fJfefSfŠ,Ì'S,Ä,ÉŠY"-,·,é] ,ô'I'ð,·,é,Æ□AfJfefSfŠfŠfXfgfEfBf"fhfE,Å'I'ð,³,ê,½,·,×,Ä,ÌfJfefSfŠ,ÉŠÖ~A,·,éfŒfR□[fh,ªŒŸ□õ,³, ê,Ü,·□B

[fJfefSfŠŒŸ□õŽž,Ì'Î□Û,Æ,È,éŠK'w],Å□AŒŸ□õ"Í^Í,ðŽw'è,Å,«,Ü,·□B[‰º^Ê,ÌfJfefSfŠ,ðŒŸ□õ] ,ð'l'ð,·,é,Æ□A[fJfefSfŠ,ÌfGfCfŠfAfX,ðŒŸ□õ]flfvfVf‡f",ªŽg—p‰Â,É,È,è,Ü,·□B,± ,ÌflfvfVf‡f",ð'l'ð,·,é,Æ□AŒŸ□õ,ÅŽw'è,³,ê,½fJfefSfŠ,Ì,Ù,©,ÉfJfefSfŠ,ÌfGfCfŠfAfX,àŒŸ□õ,Å,«,Ü,·□B

{button ,AL(`preferences',0,`',`')} <u>ŠÖ~A□€-Ú</u>

## <sup>[]</sup>[]Cumulus,ÌfJfXf^f}fCfY fJf^f□f0□EfIfvfVf‡f",Ì□Ý'è

[fJf^f□fO□EfIfvfVf‡f"]f\_fCfAf□fOf{fbfNfX,Å,Í□ACumulus,ªfIfŠfWfif‹ftf@fCf‹,ðfJf^f□fO,·,é•û-@,ÆfJf^f□fO'†,É"Ç,Ý□ž,Ü,ê,é□î•ñ,ÌŽí—Þ,ð□§Œä,Å,«,Ü,·□BfJf^f□fO¥fIfvfVf‡f",Ì□Ý'è"à e,ðŠù'¶,ÌfŒfR□[fh,É"½‰f,³,¹,é,É,Í□A [f<u>ŒfR□[fh□î•ñ,Ì□X□V]</u>,ðŽQ□Æ,µ,Ä,,¾,³,¢□B

- ,±,Ìf\_fCfAf□fOf{fbfNfX,É,ĺŽŸ,ÌflfvfVf‡f",ª, ,è,Ü,·□B
- $[E f]f^f[fOŽž, ÉffftfHf (fg, Å"o^, \mu, ½, ¢ft][fU'e (`, lfm][fg]AfXfe][f^fX-¼]Aft][fU-¼, lŽw'e]$
- $[]E f]f^f[]fOŽž, ÉffftfHf < fg, Å<u>"o~^</u>, <math>\mu$ , ½, ¢f]<u>fefSfŠ</u>-¼, ÌŽw'è
- □E fŒfR□[fh,Ì□d•¡,ð"F,ß,é,©,Ç,¤,©
- $[E \ \ \mathring{Z}g-p\% \hat{A}'', \grave{E}_{ftf@fCf < ftfBf < f^, \mathcal{A}E, *, \grave{I}] \ddagger ]^{\sim}$
- <code>□E fTf€flfCf<□ì□¬,ÉŠÖ,·,é□Ý'è</code>

#### [fJf^f\_f0fJfvfVf‡f"]f\_fCfAf\_f0f{fbfNfX,ð•\ަ,•,é,É,Í[A^ȉº,ÌŽè[],É[],¢,Ü,•[B

- [ftf@fCf<]f□fjf...□[, ©, ς[f]f^f□fOfIfvfVf‡f"],ð'I'ð,μ,Ü,·□B</li>
   [f]f^f□fOfIfvfVf‡f"]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B
- f^fu,ð□Ø,è'Ö,¦,é,É,Í□Af^fu,Ìf^fCfgf<,ðfNfŠfbfN,µ,Ü,·□B</li>

<u>^ê"Ê</u> <u>f]fefSfŠ</u> <u>f]f^f⊡fO</u>

<u>ftf@fCf‹Œ`Ž®</u>

 □Ý'è,ð□s,¢□A ["K—p],ðfNfŠfbfN,µ,Ü,·□B,·,×,Ä,Ì□Ý'è,ð— Lο,É,µ,ÄfEfBf"fhfE,ð•Â,¶,é,É,Í□A[OK],ðfNfŠfbfN,µ,Ü,·□BŽæ,è□Á,·,É,Í□A[fLfff"fZf<] ,ðfNfŠfbfN,µ,Ü,·□B

{button ,AL(`customizing',0,`',`')} <u>ŠÖ<sup>~</sup>A∏€–Ú</u>

#### └─Cumulus,ÌfJfXf^f}fCfY └─fJf^f□f0□EfIfvfVf‡f",Ì□Ý'è fJf^f□f0□EfIfvfVf‡f", [^ê"Ê]f^fu

[^ê"Ê]f^fu,Å,ĺ<u>ftf@fCf<</u>,ð<u>f]f^f□fO,·,é</u>–^,ÉŠ",è"–,Ä,ç,ê,é□Ý'è,ðŽw'è,µ,Ü,·□B,±,ê,ç,Ì□Ý'è,Ì,¤ ,¿,Ù,Æ,ñ,Ç,ĺŒã,Å<u>[fŒfR□[fhfvf□fpfefB]f\_</u>fCfAf□f0f{fbfNfX,Å,à□Ý'è,·,é,±,Æ,ª,Å,«,Ü,·□B

flfvfVf‡f"/ ftfB□[f‹fh	—p"r
fŒfR[[fh[]Afm[][fg	<u>[fm□[fg]</u> ftfB□[f‹fh,ÉfefLfXfg,ð"ü— ĺ,·,é,Æ□AfJf^f□fOŽž,É□ì□¬,³,ê,é,·,×,Ä,Ì□V‹ KfŒfR□[fh,É,»,Ì"à—e,ªŽ©"®"I,É'Ç ‰Á,³,ê,Ü,·□B <u>[fŒfR□[fhfvf□fpfefB]fEfBf"f</u> hfE,Åfm□[fg,ð•Ò□W,µ,½,è‰{—— ,µ,½,è,·,é,±,Æ,ª,Å,«,Ü,·□B
fŒfR[[fh[AfXfe[][ f^fX	f fbfvfAfbfvfŠfXfg, ©, cfXfe[[f^fX- $\frac{1}{4},\delta'l'\delta, \cdot, \acute{e}, \And$ []Af]f^f]fOŽž, É[]i]¬, <sup>3</sup> , ê, é, ·, × ,Ä, ][V, µ, ¢fŒfR][fh, É, », ]fXfe[[f^fX- $\frac{1}{4}, {}^{a}"o^{, 3}, e, Ü, \cdot]B, Ç, ]fŒfR][fh, É, àft][fU' è<`, ]fXfe[[f^fX, \deltaŠ,,, è"-,Ä, é, ±,Æ, a, Å, «, Ü, ·]BfXfe[[f^fX, \deltaŠ,,, è"-,Ä, é, ±,Æ, Å]A"Á'e, ]fŒfR][fh, ][o'Ô, â]o<µ, \deltaŠÖA,Ä, -, é, ±,Æ, a, Å, «, Ü, ·]BfXfe[[f^fX, ]]]¬, âŽg—p,ÉŠÖ, ·, é[Ú, µ, ¢]î•ñ, []AfŒfR][fhfXfe][f^fXfX, ]Žg—p, \deltaŽQ[]Æ, µ, Ä,, 3, 4]B$
fŒfR[[fh]Aft][fU	,±,±,É"ü—ĺ,³,ê,½– ¼'O,ª□V‹KfŒfR□[fh,Ì□uf†□[fU□vftfB□[f‹fh, É"o˜^,³,ê,Ü,·□B
fJf^f□fOŽž□AflfŠf Wfif‹,©,çfm□[fg,ð Žæ,è□ž,Þ	flfŠfWfif <ftf@fcf<,é•û'¶,³,ê,ä,¢ ,éfefLfXfg[]î•ñ,ðf]f^f[]fO'†,ÉŽ©"®"I,É[<u>fŒ</u> <u>fR[[fhfvf]fpfefB]f_fCfAf[]fOf{fbfNfX,Ì[fm]</u> <u>[fg]ftfB[]f<fh< u=""> ,ÉŠÜ,ß,Ü,·[]B,½,Æ,¦,Î[Compound Document Filter],ð'I'ð,·,é,Æ[]AMicrosoft Word•¶[]',É•Û'¶,³,ê,½"[]Œv[]i'PŒê,Æ•¶Ž š,Ìf]fEf"fg,È,Ç[]j,ð"Ç,Ý[]ž,Þ,± ,Æ,ª,Å,«,Ü,·[]B</fh<></u></ftf@fcf<,é•û'¶,³,ê,ä,¢ 
fJf^f□fOŽž□Afvf□f OfŒfXfo□[,ð•\ ަ,∙,é	fJf^f□fO,ðŠJŽn,·,é'O,É□AflfŠfWfif‹ftf@fCf‹ ,Ì□‡Œv□",ðfJfEf"fg,µ,Ü,·□BfJf^f□fO'†□A[□i □s□ó‹µ]f_fCfAf□fOf{fbfNfX,ÉflfŠfWfif‹ftf@ fCf‹-¼,ÆŠ®—¹fp□[fZf"fe□[fWfo□[,ª•\ ަ,³,ê,Ü,·□B,± ,ÌflfvfVf‡f",ð'l'ð,·,é,Æ□AfJf^f□fO,Ì'¬"x,Í'á ‰º,µ,Ü,·□B
fJf^f□fOŠ®— ¹Žž□AŽ©"®"I,Éfv f□fpfefBfEfBf"fhfE ,ðŠJ,	□V‹KfŒfR□[fh,ð□ì□¬,·,é– ^,É <u>[fŒfR□[fhfvf□fpfefB]fEfBf"fhfE</u> ,ð•\ ަ,μ,Ü,·□BfJf^f]fOŒã,ÉfŒfR□[fh,Ìfvf]]fpfe fB,ð‹K'¥"I,É□ì□¬,Å,«,é,½,β□A,± ,ÌflfvfVf‡f",ª•Ö—~,È□ê□‡,ª, ,è,Ü,·□B

{button ,AL(`catalog options',0,`',`')}  $\underline{\mathring{SO}^{-}A_{\Box} \in -\acute{U}}$ 

#### ©Cumulus,ÌfJfXf^f}fCfY ©fJf^f□f0□EfIfvfVf‡f",Ì□Ý'è fJf^f□f0□EfIfvfVf‡f",[fJfefSfŠ]f^fu

[f]fefSfŠ]f^fu,ĺ□AfJf^f□fOŽž,ÉffftfHf‹fg,Å"o˜^,µ,½,¢<u>f]fefSfŠ-</u> ¼,ðŽw'è,Å,«,Ü,·□B[f]f<u>^f□fOŽž,Éf]fefSfŠ,ð"o˜^,·,é]</u>,ðŽQ□Æ,µ,Ä,,¾,³,¢□B

ffftfHf<fg,ÌfJfefSfŠ,ð"o˜^,·,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

#### [fvfŠfZfbfgfJfefSfŠ]fŠfXfg,É"o˜^,·,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·[]B

- 1. [f]fefSfŠ^ê——]fŠfXfg,  $\mathbb{C}$ ,  $c\Box A$  "o ~ ,  $\mu$ ,  $\frac{1}{2}$ ,  $fJfefSfŠ-\frac{1}{4}$ ,  $\delta$  'I '  $\delta$ ,  $\mu$ ,  $\ddot{U}$ ,  $\Box B$
- 2. [' $\zeta$ ‰Á]f{f^f",ðfNfŠfbfN, $\cdot$ ,é, $\Box$ ]AfJfefSfŠ-¼,ðf\_fuf<fNfŠfbfN, $\mu$ , $\ddot{U}$ , $\Box$ B

#### "o<sup>~</sup>^,³,ê,½fJfefSfŠ,ð□í□œ,∙,é,É,Í□A<sup>^</sup>ȉº,ÌŽè□‡,É□],¢,Ü,•□B

- 2.  $[\Box i \Box \varpi] f \{ f^{f^{*}}, \delta f N f S f b f N, \mu, U, \cdot \}$

[ftfHf‹f\_-¼,ðf]fefSfŠ"o~^,·,é] ,ĺ[]AflfŠfWfif‹ftf@fCf‹,ÌfffBfŒfNfgfŠ,ðf]fefSfŠ,Æ,µ,ÄfŠfXfg,É"o~^,·,é,©,Ç,¤ ,©,ðŽw'è,µ,Ü,·[]BftfHf‹f\_-¼,ðŽg—p,·,éf]fefSfŠ,ĺ[]AŽè"®,Å[]ì[]¬,µ,½f]fefSfŠ,Æ,ĺ•\ ަ,ª^Ù,È,è[]A[]¬,³,ÈftfHf‹f\_‹L[]†,ª•\ަ,³,ê,Ä,¢,Ü,·[]B

 $ftf@fCf <, \delta'O, a, A, \ddot{A}fvf[]fWfFfNfg, aftf@fCf < \mathbb{C} \ \check{Z} \otimes, ^{2}, \mathcal{E}, \acute{E}ftfHf < f_, \acute{E}[] \otimes --[], \mu, \ddot{A}, ``, - , \mathcal{E}[]AfJf^f[]fO, \delta1 & n, l\check{Z} e_[] +, Å\check{S} e'P, \acute{E}fJf^f[]fO, \cdot, \acute{e}, \pm , \mathcal{A}, a, U, \cdot [] B, ^{3}, c, \acute{E}[]AfJf\check{S}fWfif < ftf@fCf <, l`fffBf EfNfgfŠ[]\' ¢, ^{2}fJfefSfŠfŠfXfg, \acute{E} \ \check{Z}_{1}, ^{3}, \acute{e}, \acute{E}, \mathcal{B}_{1}A \mathbb{C}^{3}, l]ftf@fCf <, l`] e_[]\check{S}, \delta, \cdot, i, a, \check{S} e'P, \acute{E} \otimes , a, ^{-}, \acute{e}, \pm, \mathcal{E}, ^{a}, A, «, U, \cdot [] B$ 

,±,ÌflfvfVf‡f",𖳌ø,É,·,é,É,Í□Af`fFfbfNf}□[fN,ðŠO,µ,Ü,·□B,±,ÌflfvfVf‡f",ð– ³Œø,É,µ,½□ê□‡,Å,à□A^ȉº,Ì3,Â,Ì∙û–@,Ì,¢,¸,ê,©,É,æ,èŠÈ'P,Éftf@fCf<,ð,³,ª,·,±,Æ,ª,Å,«,Ü,·□B

 $\label{eq:linear_line$ 

- $\Box E f G f R \Box [fh, \delta'l' \delta, \mu \Box A [f G f R \Box [fh] f \Box f j f ... \Box [, @, c \underline{[f G f N f X f v f \Box \Box [f \infty]}, \delta'l' \delta, \cdot, e$
- <u>□E <u>ŒŸ□õfc□[f<fo□[</u>,ðŽg—p,μ,ÄftfHf<f\_-¼,ðŒŸ<u>□</u>õ,·,é</u>

{button ,AL(`catalog options',0,`',`')}  $\underline{\check{S}O^{A} \square \underbrace{ - \acute{U}}$ 

#### <sup></sup> Cumulus,ÌfJfXf^f}fCfY <sup>¶</sup>fJf^f□f0□EfIfvfVf‡f",Ì□Ý'è [fJf^f□f0□EfIfvfVf‡f"]□A[fJf^f□f0]f^fu

[ʃJf^f□fO•û-@]

,Ĩ᠋̈́́́́́́́́́ĂĊumulus,ªŪV,µ,¢ftf@fCf<,ðfJf^f□fO,∙,é,©□AŠù'¶,ÌfŒfR□[fh,ð□X□V,∙,é,©,ðŽw'è,µ,Ü,·□B^È ‰º,ÌflfvfVf‡f",©,ç'l'ð,∙,é,±,Æ,ª,Å,«,Ü,·□B

 $\label{eq:constraint} \begin{array}{l} \label{eq:constraint} \blacksquare E ~ [`C & A, I, Y & S, x ], \\ \hline \end{tabular} A, & U, \en$ 

□E ['ljÁ/□X□V,ð□s,¤],Í□A,Ü,¾fJf^f□fO,³,ê,Ä,¢
,È,¢ftf@fCf<,É'Î,µ,Ä,Í□V,µ,¢fŒfR□[fh,ð□ì□¬,µ□AŠù'¶,ÌfŒfR□[fh,Í□X□V,µ,Ü,·□B</p>

[ƒ]ƒ^ƒ□ƒO,Ì□d•;],Å,Í□Aƒ]ƒ^ƒ□ƒO'†,ŃŒƒR□[ƒh,Ì□d•;,ð"F,ß,é,©,Ç,¤,©,ðŽw'è,·,é,± ,Æ,ª,Å,«,Ü,·□BƒŒƒR□[ƒh,Ì□d•;,ð"F,ß,é,É,Í□A[□d•;,ð"F,ß,é] ,ð'l'ð,μ,Ü,·□B1,Â,Ìftƒ@ƒCƒ<,ª•;□"‰ñƒ]ƒ^ƒ□ƒO,³,ê,È,¢,æ,¤,É,·,é,É,Í□A[□d•;,ð"F,ß,È,¢],ð'l'ð,μ,Ü,·□B

,±,ÌflfvfVf‡f",Å,Í□AfJf^f□fOŽž,É□AflfŠfWfif‹ftf@fCf‹,ð<u>□'ŒÉftfHf‹f\_</u>,ÉfRfs□[,·,é,©,Ç,¤ ,©,ðŽw'è,Å,«,Ü,·□B,±,ÌflfvfVf‡f",Í□AfJf^f□fOf□fjf...□[,Ì[fJf^f□fO□Y'è],Å□A□'ŒÉftfHf‹f\_,ÌŽg p,ð[fJf^f□fOflfvfVf‡f",É□],¤],É□Ý'è,³,ê,Ä,¢,é□ê□‡,É,Ì,Ý□AŽg—p,Å,«,Ü,·□B

 $[fVf+[fgf]fbfg], Å[fŠf"fN]æ, \deltaf]f^f[fO, , é]$ 

,ðʻlíð,·,é,Æ□ACumulus,ĺfVf‡□[fgf]fbfgftf@fCf‹,ÌflfŠfWfif‹ftf@fCf‹,ðŒŸ□õ,µ,Ü,·□B[-³Ž‹,·,é] ,ðʻlíð,·,é,Æ□A,±,Ì‹@"\,ĺŽg—p•s

$$\begin{split} & \hat{\mathsf{A}}, \dot{\mathsf{E}}, \dot{\mathsf{E}}, \dot{\mathsf{C}}, \ddot{\mathsf{U}}, \dot{\mathsf{U}} \\ & \hat{\mathsf{B}}, \overset{1}{2}, \mathcal{E}, \\ & \hat{\mathsf{H}}, \hat{\mathsf{I}} \\ & \hat{\mathsf{A}}, \\ & \hat{\mathsf{H}}, \\ & \hat{\mathsf{U}, \\ & \hat{\mathsf{U}}, \\$$

%Â,Ì□ê□‡□A͡fV͡f‡□[fɡf]͡fb͡fɡ,ð͡fŒfR□[fh͡fEfB͡f"fhfE,Öfhf□fbfv,·,é,¾,¯,Å□AflfŠfWfif<,ðfJf^f□fO,Å,«,Ü,· □B

[ƒ]ƒ^ƒ□ƒOŽž],Å,Í□Aƒ]ƒ^ƒ□ƒO,µ,È,¢ƒtƒ@ƒCƒ<,ðŽw'è,·,é,±,Æ,ª,Å,«,Ü,·□B^ê"Ê"I,É,Í□A ‰ó,ê,½ƒtƒ@ƒCƒ<,ðƒ]ƒ^ƒ□ƒO,·,é,Æ□áŠQ,ª"□¶,µ,Ü,·□B□áŠQ,ÌŒ´^ö,Æ,È,éƒtƒ@ƒCƒ<,ª,í,©,Á,Ä,¢ ,é□ê□‡,Í□A,»,̃tƒ@ƒCƒ<,ð[ƒ]ƒ^ƒ□ƒO<ÖŽ~ƒtƒ@ƒCƒ<]ƒŠƒXƒg,É'ljÁ,µ,Ä,,¾,³,¢□B

 $\begin{array}{l} & \left[ \Delta \tilde{S} Qftf@fCf < , \delta \tilde{Z} \otimes " \otimes "I, \acute{E} [f] f^{\Box} fO < O \tilde{Z} ~ ftf@fCf < ]f \tilde{S} fXfg, \acute{E} \tilde{S}, , \grave{e}"- , \ddot{A}, \acute{e}, \acute{E}, I[] A[[] \Delta \tilde{S} Qftf@fCf < , \delta \tilde{Z} \otimes " \otimes " \circ ~ , \cdot , \acute{e} ], \delta' I' \delta, \mu, \ddot{U}, \cdot \Box B, \pm, \dot{i}' I' \delta, \acute{E}, æ, \grave{e} f] f^{f} fD fp ft fH \Box [f] f" fX, \dot{i}' \Delta \tilde{S} \otimes \tilde{S}, , \acute{e}, \acute{e}, \dot{A}, \dot{$ 

‰Â,É,È,é,Æ☐ACumulus,ĺ□ÅŒã,Ìftf@fCf‹,ÌfŒfR□[fh,ðfJf^f□fO,³,ê,½□ó'Ô,Å^ÛŽ□,µ,Ü,·□BfVfXfef€ ,ªfNf‰fbfVf…,∙,é,Æ□ACumulus,厩"®"I,É,»,Ìftf@fCf‹,ð[ƒJf^f□fO‹ÖŽ~ftf@fCf‹]fŠfXfg,É'Ç ‰Á,µ,Ü,·□B

### fJf^f□fO,μ,È,¢ftf@fCf<,ðŽw'è,∙,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,∙□B

1. [ftf@fCf<"o^^], $\delta$ fNfŠfbfN, $\mu$ , $\ddot{U}$ , $\Box$ B

[ftf@fCf<,ðŠJ,]f\_fCfAf□fOf{fbfNfX,ª•\ަ,³,ê,Ü,·□B

[ftf@fCf<,ðŠJ,]f\_fCfAf□fOf{fbfNfX,Å□Aftf@fCf<,ð'l'ð,µ,Ä[ŠJ,],ðfNfŠfbfN,µ,Ü,·□B</li>
 'l'ð,µ,½ftf@fCf<,ª[fJf^f□fO<ÖŽ~ftf@fCf<]fŠfXfg,É•\ަ,³,ê,Ü,·□B</li>

### [fJf^f[]fO<ÖŽ~ftf@fCf<]fŠfXfg,©,çftf@fCf<,ð[]í[œ,·,é,É,Í[]A^ȉº,ÌŽè[]‡,É[]],¢,Ü,·]B

- $1. \quad [f]f^f f f o \langle \ddot{O} \check{Z} \sim f t f @ f C f \langle ]f \check{S} f X f g, \\ @, c f t f @ f C f \langle , \eth' l' \eth, \mu, \ddot{U}, \cdot ] B$
- ["o<sup>~</sup>^‰ð□œ]f{f<sup>f</sup>,ðfNfŠfbfN,μ,Ü,·□B

ʻl'ð,μ,½ftf@fCf<,ª∏í∏œ,³,ê,Ü,·∏B

{button ,AL(`catalog options',0,`',`')} <u>ŠÖ~A□€-Ú</u>

#### <sup>I</sup>If^f□f0□EfIfvfVf‡f",Ì□Ý'è <sup>I</sup>If∫^f□f0□EfIfvfVf‡f", [f]f^f□f0]f^fu □'ŒÉftfHf‹f\_,É,Â,¢,Ä

fJf^f[fO,³,ê,½flfŠfWfif‹ftf@fCf‹,ªCumulus,ÅŽw'è,µ,½ftfHf‹f\_[ì[]'ŒÉftfHf‹f\_,Æ,¢,¢ ,Ü,·[]j,ÉfRfs[[,³,ê,é,æ,¤,ÉCumulus,ð[\[]¬,·,é,±,Æ,ª,Å,«,Ü,·[]B[]'ŒÉftfHf‹f\_,ĺ[AŠef†[[fU,Ì[]Ù— Ê,Å[]A, ,é,¢,ĺflfŠfWfif‹ftf@fCf‹,ªfJf^f[]fO,É'ljÁ,³,ê,é,½,Ñ,É[]Aftf@fCf‹,ªfRfs[[,³,ê,é,æ,¤,É[]\ []¬,·,é,±,Æ,ª,Å,«,Ü,·[]B

ŽÀ□Û,ÌfIfŠfWfif<ftf@fCf<,Ì^Ê'u,ĺŒ³,Ì,Ü,Ü,Ä,·,ª□AfŒfR□[fh,ÌfŠftf@fŒf"fX□æ,Í□'ŒÉftfHf<f\_"à,ÌfRfs□ [,Ì^Ê'u,ðަ,µ,Ä,¢

,Ü,·□B□'ŒÉftfHf<f\_,ɕۑ¶,³,ê,½flfŠfWfif<ftf@fCf<,ð'N,ª□C□³,Å,«,é,©,Í□Af†□[fU,ªfRf"fgf□□[f<,Å,«, Ü,·□B

#### <sup>[]</sup>Cumulus,ÌfJfXf^f}fCfY <sup>[]</sup>fJf^f⊡f0□EfIfvfVf‡f",Ì□Ý'è fJf^f⊡f0□EfIfvfVf‡f", [ftf@fCf‹Œ`Ž®] f^fu

 $\begin{array}{l} [ftf@fCf<\mathbb{C}\\tilde{Z}\otimes]f^fu, \ensuremath{\mathbb{C}}\scients, \ensuremath{\mathbb{$ 

$$\begin{split} &\check{Z}g -p & \hat{A}^{*} \ \dot{E}ftfBf < f^{,} \acute{E}, \\ &i \square A \square \P' [, \acute{E} \square \neg, ^{3}, \grave{E}f`fFfbfNf \} \square [fN, ^{a} \bullet t, ¢, \ddot{A}, ¢, \\ &, \ddot{U}, \square B \check{S}eftfBf < f^{,} \\ &i \square ", \\ &i \square ", \\ &i \uparrow t f @ fCf < C ` \check{Z} @, \\ &i \uparrow T f \square [fg, Å, «, \ddot{U}, \cdot \square Bf\check{S}fXfg & E' = A, \\ &, \\ &i \uparrow XfNf \square [f < fo \square [, ð \check{Z}g, \acute{A}, \ddot{A} \square A, \cdot, \times, \ddot{A}, \\ &i \uparrow G f'' fg f\check{S}, \\ &i \to A, \\ &i \uparrow A = A, \\ &i \uparrow A = A, \\ &i \uparrow A = A, \\ &i \downarrow A$$

,±,Ìf^fu,Å,ĺŽŸ,Ì'€□ì,ª,Å,«,Ü,·□B

□E ftfBf<f^,Ì□‡□~,ð•ï□X,·,é

 $\label{eq:linear} \begin{array}{ll} & & & & \\ & & & & \\ & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & &$ 

□E ftf@fCf<,ð'ljÁ/□í□œ

□E fJf^f□fO't,ÉCumulus,ª"Ç,Ý□ž,Þ□î•ñ,Ìf^fCfv,ðœ^'è□ifTf|□[fg,³,ê,Ä,¢,é□ê□‡□j

#### ftfBf‹f^,ª[]î•ñ,ð"Ç,Ý[]ž,Þ•û-@,ðŒ^'è,੶,é,É,ĺ

- [□Ý'è]f\_fCfAf□fOf{fbfNfX,Å[fvf□fpfefB],ðfNfŠfbfN,µ,Ü,·□B
   Žg—p‰Â"\,È,ç□A□Ý'èf\_fCfAf□fOf{fbfNfX,ªŠJ,«,Ü,·□B
- Žg—p‰Â"\,ÈftfB□[f<fh,ð'2□®,μ,½,ç[OK],ðfNfŠfbfN,μ,Ü,·□BŽæ,è□Á,·,É,ĺ[fLfff"fZf<] ,ðfNfŠfbfN,μ,Ü,·□B

,±,Ìf^fu,Å,Í□AŽŸ,Ì,±,Æ,à,Å,«,Ü,·□B

<u>ftf@fCf‹Œ`Ž®,ðfŠfXfg,Ì□ã,Ü,½,͉º,É^Ú"®,∙,é</u>

<u>ftf@fCf‹Œ`Ž®,Ì•Ò∏W</u>

{button ,AL(`catalog options',0,`',`')} <u>ŠÖ~A□€-Ú</u>

#### IJfJf^f□fO□EfIfvfVf‡f",Ì□Ý'è IJ[ftf@fCf<Œ`Ž®]f^fu fŠfXfg,ÅŒ`Ž®,ð^Ú"®

ftf@fCf‹Œ`Ž®,Ì[]‡"Ô,ð[]\_[]‡,©,ç[]~[]‡,É[]Ø,芷,¦,é,É,Í[]AŠe —",ÌŒ©[]o,µ[]i[]‡"Ô[]AŠg'£Žq[]Aftf@fCf‹Œ`Ž®[]A,Ü,½,ÍftfBf‹f^[]j,ðfNfŠfbfN,µ,Ü,·[]B

 $\textcircled{A}_X, \textcircled{C}^{*}, \textcircled{A}_N, \textcircled{C}^{*}, \textcircled{A}_N,$ 



°ê″O ‰⁰,É^Ú"®

#### <sup></sup>∭fJf^f□fO□EfIfvfVf‡f",Ì□Ý'è ∭[ftf@fCf‹Œ`Ž®]f^fu ftf@fCf‹Œ`Ž®,Ì•Ò□W

Žg—p‰Â"\,Èftf@fCf‹Œ`Ž®,É,Í[]A,·,×,Äf`fFfbfNf}[][fN,ª•t,¢,Ä,¢,Ü,·[]B"Á'è,Ìftf@fCf‹Œ`Ž®,ðŽg —p‰Â,É,·,é,Æ[]A,»,ê,³f][f,fŠ,Éf][][fh,³,ê,Ü,·[]B•[]'iŽg—p,µ,È,¢ftf@fCf‹Œ`Ž®,ðŽg—p<ÖŽ~,É,·,é,Æ[]Afvf]]fOf‰f€,ÌfpftfH[][f}f"fX,²Œü[]ã,µ,Ü,·[]B

 $\begin{array}{l} Canto, ^{a}\Box V, \mu, \varphi ftf @fCf < & Ž & , ð 'C & Á, \mu, <math>\frac{1}{2}\Box = 1 & -Ž D, WebfTfCfg (www.crs.co.jp), & , c^{-3} \\ & ;, Åf_fEf ``f_\Box [fh, Å, <, Ü, : ]B UV, \mu, \varphi ftf @fCf < & Ž & , ð fCf ``fXfg [[f <, \mu, ÄŽg - p, ; é, É, []A, Ü, , f_fEf ``f_D [[fh, \mu, Ä ]A, >, ê, & , cflf ``f & fCf ``fXfgf C [[fVf + f`', ]Ž w Ž |, É ]], Á, Ä, - , , 'A, '', & C B B C f ``fXfg [[f <, ^3 S & -1, ., é, & C A []J f ^ f ] O, ., éftf @fCf < & Ž & ]fSfXfg, Éftf @fCf < & Ž & , a < Z & , a < Z & J & Z & J & Z & J & Z & J & \\ & Z_{1}, ^{3}, ê, Ü, ., ^{a} \Box A Z & -p & A, E, ., é \cdot K - v, ^{a}, . e, Ü, : \Box B & \\ \end{array}$ 

#### ftf@fCf<Œ`Ž®,ð—LŒø,Ü,½,ĺ-³Œø,É,•,é,É,ĺ□A^ȉº,ÌŽè□‡,É□],¢,Ü,•□B

- [□‡"Ô],Ì—ñ,Å□A—LŒø,Ü,½,Í-<sup>3</sup>ο,É,·,éftf@fCf‹Œ`Ž®,ð'I'ð,μ□A[□Ý'è]f{f^f",ðfNfŠfbfN,μ,Ü,·□B [ftf@fCf‹Œ`Ž®Žw'è]f fCfAf□fOf{fbfNfX,ª•\ަ,<sup>3</sup>,ê,Ü,·
- [,±,Ìftf@fCf‹Œ`Ž®,Ì"ü—ĺ,ð—LŒø,É,·,é],Ìf`fFfbfNf}□[fN•\ަ,ð□Ø,è'Ö,¦,Ä□Aftf@fCf‹Œ`Ž®,ð —LŒø/-³Œø,É,µ,Ü,·□B
- ,·,×,Ä,Ì•Ï□X,ð—LŒø,É,·,é,É,Í□A[OK],ðfNfŠfbfN,µ,Ü,·□BŽæ,è□Á,·,É,Í□A[fLfff"fZf<] ,ðfNfŠfbfN,µ,Ü,·□B

{button ,AL(`catalog options',0,`',`')}  $\underline{\check{SO}^{-}A_{\Box} \in -\acute{U}}$ 

#### Šù'¶,ÌftfBf‹f^,ðŽg—p,µ,Äftf@fCf‹Œ`Ž®,ð'ljÁ,·,é,É,Í□A^ȉº,ÌŽè□‡,É□],¢,Ü,·□B

- $\begin{array}{ll} 1. & [f] \Box [fh,\mu,\ddot{A}, \mbox{\',}eftf@fCf \mbox{\',}ffBf \mbox{\',}f^{\mbox{\',}}, \mbox{\',}dfNf\mbox{\',}ffBf \mbox{\lor,}ffBf \mbox{\',}ffBf \mbox{\',}ffBf \mbox{\',}ffBf \mbox{\lor,}ffBf 
- "K□Ø,ÈWindows,ÌŠg'£Žq(\*.eps,È,Ç),ð[Windows Šg'£Žq]ftfB□[f<fh,É"ü—ĺ,µ,Ü,·□B</li>
- 3. "K $\Box$ Ø,Èftf@fCf<Œ`Ž $\otimes$ -¼,ð[Œ`Ž $\otimes$ ]ftfB $\Box$ [f<fh,É"ü—Í,µ,Ü, $\Box$ B
- 4. [ftfBf<f^fRf"fgf $\Box$ [[f<,ðŽg,x],©,çftfBf<f^,ð'l'ð, $\mu$ ,Ü,· $\Box$ B
- Žg—p‰Â"\,Å, ,ê,Î□A[fvf□fpfefB],ðfNfŠfbfN,µ,Ä□AftfBf‹f^,Ì□Ý'è,ð□s,¢ ,Ü,·([ftfBf‹f^,Ì"®□ì□Ý'è]ŽQ□Æ)□B
- ,·,×,Ä,Ì•Ï□X,ð—LŒø,É,·,é,É,Í□A[OK],ðfNfŠfbfN,µ,Ü,·□B•Ï□X,ðŽæ,è□Á,·,É,Í□A[fLfff"fZf<] ,ðfNfŠfbfN,µ,Ü,·□B

$$\label{eq:linear_states} \begin{split} & \|\hat{A}\| \gg \bullet ifCf''fXfg[[f<\mathbb{T}^3, \acute{E}'C, \acute{E}, \acute{A}, \mu, \frac{1}{2}ftfBf<f^\mathbb{T}^3, \acute{E}$$

#### ftf@fCf<Œ`Ž®,ð[lí]œ,·,é,É,ĺ[A^ȉº,ÌŽè[‡,É[],¢,Ü,·[]B

- $1. \quad [\Box \ddagger "\hat{O}], \dot{I} \tilde{n}, \dot{A} \Box A'' K \Box \emptyset, \dot{E} ft f @ fC f < \mathbf{E} ` \check{Z} \circledast, \delta' I' \delta, \mu, \ddot{U}, \cdot \Box B$
- [□í□œ],ðfNfŠfbfN,μ,Ü,·□B

{button ,AL(`catalog options',0,`',`')}  $\underline{\check{S}O^{A} \square \underbrace{ \in -\acute{U}}$ 

#### <sup>[]</sup>Cumulus,ÌfJfXf^f}fCfY <sup>[]</sup>fJf^f□f0□EfIfvfVf‡f",Ì□Ý'è fJf^f□f0□EfIfvfVf‡f", [fTf€fIfCf<]f^fu

[fTf€flfCf<]f^fu,©,ç□AfJf^f□fO'†,Ü,½,ĺfŒfR□[fh□X□VŽž,É□ì□¬,³,ê,½<u>fTf€flfCf<</u>,Ì•iŽ¿,ð□§Œä,·,é,± ,Æ,ª,Å,«,Ü,·□BfTf€flfCf<,Ì□¡-@,Í□A<u>[f]f^f□f0□Ý'è]f\_fCfAf□f0f{fbfNfX</u>,Å□Ý'è,µ,Ü,·□B

fEfBf"fhfE,̉E'¤,ÉfTf€flfCf‹,ÌfTf"fvf‹,ª•\ަ,³,ê,Ü,·□B,± ,ê,ðŒ©,È,ª,ç•iŽ¿,ð′²□®,μ□Α□Å"K,ÈŠOŠÏ,É□Ý'è,μ,Ä,,¾,³,¢□BfTf"fvf‹,Ì□ã,É•\ަ,³,ê,Ä,¢ ,é,Ì,Í□AfTf€flfCf‹fTfCfY□i′P^Ê□FfsfNfZf‹□j,ÆfTf€flfCf‹,ª□è,ß,éfffBfXfN—e—Ê,Ì-Ú^À,Å,·□B

[fTf€flfCf<•iŽ¿],Å,Í□Aftf@fCf<•Ê,É•iŽ¿,ð'l'ð,Å,«,Ü,·

[f‰fCf"fA□[fg]□F2□F□i"'□•□j,Ìftf@fCf<---p</pre>

[fof ] fof ] fof ] fof ] fof ] fof ] fof ] fof ] for all the set of the set

\_E [f]f‰\_[]\_Ff]f‰\_[[,ðŽg—p,μ,Ä,¢,éftf@fCf<—p

‰æ'œ f, <b></b> [[fh	∙W⊡€	_,∙iŽ¿
f ‰fCf"fA □[fg	"′ <b>□•2ŠK</b> ′²	4□FfOfŒ□[ŠK'²
fOfŒ[[[f XfP[][f<	256ŠK′²JPEG′á∙iŽ¿	256ŠK′²JPEG∏,∙iŽ¿
fJf‰⊡[	ftf <fjf‰∏[jpeg'á∙iž¿< td=""><td>;tf<fjf‰∏[jpeg∏,∙iž< td=""></fjf‰∏[jpeg∏,∙iž<></td></fjf‰∏[jpeg'á∙iž¿<>	;tf <fjf‰∏[jpeg∏,∙iž< td=""></fjf‰∏[jpeg∏,∙iž<>

[fTf€flfCf‹,Ì□Å"K‰»],ðf`fFbbN,·,é,Æ□AfJf^f□fO□ì‹Æ'†,É□AfTf€flfCf‹,ÌŠOŠÏ,ðŽ©"®"I,É□Å"K ‰»,µ,Ü,·□B[<u>fŒfR□[fhfEfBf"fhfE]</u>,Å□Å"K‰»,µ,½,¢fŒfR□[fh,ð'I,Ñ□A[fŒfR□[fh]f□fjf... □[,©,ç[fTf€flfCf‹,ð'N-¾,É],ðfNfŠfbfN,µ,Ü,·□B

 $[fTf \in flfCf <, \hat{l} \square \square \neg ], \hat{A}, \hat{I} \square AfTf \in flfCf <, \hat{l} \square \hat{\square} \neg \bullet \hat{u} - @, \delta' l' \delta, \mu, \ddot{U}, \cdot$ 

- □E [flfŠfWfif<"à,ÌfTf€flfCf<□i, ,鎞□j],ðf`fFfbfN,,é,Æ□AflfŠfWfif<,Ìftf@fCf<,ɕۊÇ,³,ê,Ä,¢,é□i, ,éŽ ž□jfTf€flfCf<□î•ñ,ð,à,Æ,ÉfTf€flfCf<,ð□ì□¬,µ,Ü,·□B'f'□,□ì□¬,Å,«,é"½-Ê□AffftfHf<fg□Ý'è,ÌfTf€flfCf<fTfCfY,æ,è□¬,³,,È,é□ê□‡,ª, ,è,Ü,·</p>
- □E [fCf□□[fW'S'Ì□iCumulus,ª□ì□¬□j],ðf`fFfbfN,·,é,Æ□A—LŒø,Èftf@fCf‹□î•ñ,ð,·,×,ÄŽg p,µ,ÄfTf€flfCf‹,ð□ì□¬,µ,Ü,·□BŠ®□¬Žž,ÌfTf€flfCf‹,ÌfTfCfY,â•iŽ¿,Í□Ý'è,Ç,¨,è,Å,·,ª□A□ì□¬,·,é,Ì,É '½□ŽžŠÔ,ª,©,©,è,Ü,·□B

{button ,AL(`catalog options',0,`',`')} <u>ŠÖ<sup>~</sup>A $\square \in -U</u>$ </u>