

[fþ][fU][DSN] f^fu

fþ[fU][DSN ,É,Â,ç,Äff[f^ fþ[fX,ì'Ç‰Á]A]íœ[A]V→,ð]s,ç,Ü,·]B,±,ê,ç,]ff[f^ fþ[fX,íRf"fsf...
[f^,É'í,µ,Äf]f[f]f<,É,È,è]AŒ»]Y,]fþ[fU][,ì,Ý,äŽg—p,Å,«,Ü,·]B

f1fvfvftf"

□à-¾

[fþ[fU][ff[f^ fþ[fX]	DSN ,ì-¼'O,Æ,»,ê,É'‰ž,·,éfhf %o]Cfo,ð]Ü,þ]A]fþ[fU][DSN ,ì'ê— ,Å,·]B]fþ[fU][DSN ,ðf_fuf<]Nf]SfbfN,·,é,Æ]Afhf‰o]CfoŒÅ— L,]ff[f^ fþ[fX,]fZfbfgfAf]fv f_fCfAf]fO f{fbfNfX,ä•]Z!,³,ê,Ü,·]B
[V\]V→]	Šù'¶,]fþ[fU][ff[f^ fþ[fX,ì]V]V,ð•]X,·,éfhf‰o]CfoŒÅ—L,]ff[f^ f]V,ì]V→f_fCfAf]fO f{fbfNfX,ð•]Z!,³,ê,Ü,·]B[V\]V→] ,ðfNf]SfbfN,·,é'O,É]A'ì]Ü,Æ,È,éfþ[fU][ff[f^ fþ[fX,]fZfbfgfAf]fv f_fCfAf]fO f{fbfNfX,©,ç'í'ð,µ,Å,“,•K—v,ä, ,è,Ü,·]B
[’Ç‰Á]	□V,µ,fþ[fU][ff[f^ fþ[fX,ð'Ç ‰Á,µ,Ü,·]B,± ,]f{f^ f“,ðfNf]SfbfN,·,é,Æ]A]ff[f^ f]V,ì]V<]K]V→] f_fCfAf]fO f{fbfNfX,ä•]Z!,³,ê,Ü,·]B]fþ[fU][ff[f^ fþ[fX,ð'Ç ‰Á,·,éfhf‰o]Cfo,ð'í'ð,µ,Ü,·]B[Š®—¹] ,ð'í'ð,·,é,Æ]A,»,]f]h]f‰o]CfoŒÅ— L,]ff[f^ fþ[fX,]fZfbfgfAf]fv f_fCfAf]fO f{fbfNfX,ä•]Z!,³,ê,Ü,·]B
[Ví]œ]	Šù'¶,]ff[f^ fþ[fX,ð]í]œ,µ,Ü,·]B[Ví]œ] ,ðfNf]SfbfN,·,é'O,É]A]í]œ,·,éfþ[fU][ff]V,ì]V,ð]Sfxfg f{fbfNfX,©,ç'í'ð,µ,Å,“,•K—v,ä, ,è,Ü,·]B
[OK]	[ODBC ff[f^ fþ[fX fAf]h]f~f]jfxfgfŒ]f^] f_fCfAf]fO f{fbfNfX,ð•]Å,¶,Ü,·]B[fþ[fU][ff[f^ f]V,ì]V, f{fbfNfX,É'í,·,é•]X,ð"K— p,·,é,½,ß,É]A[OK],ðfNf]SfbfN,·,é•K— v,í, ,è,Ü,¹,ñ]B]f]Sfxfg f{fbfNfX,É'í,·,é•]X,í]A]ff[f^ f]V,ì]V,]fZfbfgfAf]fv f_fCfAf]fO f{fbfNfX,Å [OK],‰]Y,³,ê,½]Z]_,Å"K—p,³,ê,Å,¢ ,Ü,·]B
[fLffff"Zf<]	[ODBC ff[f^ fþ[fX fAf]h]f~f]jfxfgfŒ]f^] f_fCfAf]fO f{fbfNfX,ð•]Å,¶,Ü,·]B[fLffff"Zf<] ,ä'í'ð,³,ê,½,Æ,µ,Å,à]A[fþ[fU][ff[f^ f]V,ì]V, f{fbfNfX,Ö,ì•]X,í]Zæ,è]Á,³,ê,È,¢ ,±,Æ,É'ØÓ,µ,Å,,¾,³,¢]B
[fwf<fv‰œ—È,ð•]Z!,µ,Ü,·]B	f{fbfNfX,Ö,ì•]X,í]Zæ,è]Á,³,ê,È,¢ ,±,Æ,É'ØÓ,µ,Å,,¾,³,¢]B

[fVfXfef€ DSN] f^fu

fVfXfef€ DSN ,É,Â,ç,Äff[]f^ f[]fX,ì'Ç‰ÁºAºAºíœºAº\º¬,ðºs,ç,Ü,·ºB,±,ê,ç,ìff[]f^ f
[]fX,ðºAºfþ[]fU[],Â,í,È,fRf„f^,É,í,µ,Äf[]fj,É,µ,Ü,·ºBfVfXfef€ºA,Ü,½,íŒŒÀ,ðžº,Âfþ[]fU[],íºAf
VfXfef€ DSN ,ìff[]f^ f[]fX,ðžg—p,Â,«,Ü,·ºB

,±,Æ,É'Ó,µ,Ä,,¾,³,¢B
[fwf<fv] fwf<fv‰æ-È,ð•\ž,µ,Ü,·B

[ftf@fCf< DSN] f^fu

ftf@fCf< DSN ,É,Â,ç,Äff@f^ f@fX,ì'Ç‰ÁAíœA\ñ→,ðs,ç,Ü,·B“,¶fhf
‰fCfo,ðfCf“fxfg@f<,µ,½,·,x,Ä,]ft@fU\,Ä<¤—L,“,æ,ÑfAfNfZfX,Ä,«,éftf@fCf<P^È,]ff@f^ f@fX,ä,è,Ü,·B,±,é,ç,]ff@f^ f@fX,ðfAft@fU\,É'Í,µ,Ä\é—p,É,·,é•K—v,àfRf“fsf...
[]f^,É'Í,µ,Äf@fj<,É,·,é•K—v,à, ,è,Ü,·B

f1fvfVf#f

à-¾

[ftf@fCf< ff@f^ f@fX] [ff@f^ f@fX,ì\é\š] f{fbfNfX,Ä•\ž,³,é,éftfHf\f_,É,Â,ç,Ä\A,»,±,Éši”[,³,é,½ftf@fCf< DSN ,ÆfTfuftfHf\f_,ð,·,x,Ä•\ž,µ,Ü,·Bftf@fCf< DSN ,ðf_fuf<fnfSfbfN,·,é,Æ\Afhf‰fCfoŒÄ—L,]ff@f^ f@fX,]ZfbfgfAfbfv f_fCfAf\ffO f{fbfNfX,ä•\ž,³,é,Ü,·Bftf@fCf< ff@f^ f@fX,ð'Ç‰Á,·,éfhf ,‰fCfo,ð'l'ð,µ,Ü,·B[\,“x\Ý'è] ,ð'l'ð,·,é,Æ\Aftf@fCf< DSN ,É'Í,·,éfL@fj@f[fh,ðžw'è,Ä,«,Ü,·B
[íœ] Šù'¶,]ff@f^ f@fX,ð\íœ,µ,Ü,·B[\íœ] ,ðfNfSfbfN,·,é'O,É\Aíœ,·,éftf@fCf< ff@f^ f@fX,ðfSfxfg f{fbfNfX,©,ç'l'ð,µ,Ä,“,•K—v,ä, ,è,Ü,·B
[ñ] Šù'¶,]ftf@fCf< ff@f^ f@fX,ì\ñ→,ð•\ñX,·,éfhf‰fCfoŒÄ—L,]ff@f^ f@fX,]ZfbfgfAfbfv f_fCfAf\ffO f{fbfNfX,ð•\ž,µ,Ü,·B[\ñ→] ,ðfNfSfbfN,·,é'O,É\A'Í\Û,Æ,È,éftf@fCf< ff@f^ f@fX,ðfSfxfg f{fbfNfX,©,ç'l'ð,µ,Ä,“,•K—v,ä, ,è,Ü,·B
[ftfHf\f_,í\Ý'è] •\ž'!t,]ftfHf\f_,ð\AOdbc fAfhf~fjfxfgŒ\ff,]žA\ss\ž,É•\ž,·,éŠù'ëftfHf\f_,É\Ý'è,µ,Ü,·B
[ff@f^ f@fX,ì\é\š] ff@f^ f@fX,ð•\ž,µ,Ü,·B,»,ì‰®,]fEfBf“fhfE,É,í\AfhfŒf“fg ftfHf\f_,]ftfuftfHf\f_,Æftf@fCf< DSN ,ä•\ž,³,é,Ü,·BfefLfXfg f{fbfNfX,ì‰E'¤,É, ,é‰®,“-†^ó,ðfNfSfbfN,·,é,Æ\AfffBfŒfNfgfS\‘¢' S\í,ä•\ž,³,é,Ü,·BODBC

[1 ,Ää,iftfHf<_,Ö (fAfCfRf“)]	fAfhf~fjfXfgfŒ>[]^,žÄs“-‰,ÉÄ‰‰,É•\ Ž!,³,ê,éŠù’èftfHf<_,íAfVfXfefŒ]^•ñ,Éž û,ß,ç,ê,Ä,¢,Ü,.,¤A,»,ê,í[ftfHf<_,íÝ’ë f{f^f“,Ä•ïõX,Ä,«,Ü,·õB
[OK]	[ODBC ff>[]^f[]][fx,fAfhf~fjfXfgfŒ>[]^ f_fCfAf[]fo f{fbfNfX,ð•Ä,¶,Ü,·õB[ftf@fCf<ff>[]^ f[]][fx] f{fbfNfX,É^,·,é•ïõX,ð“K— p,.,é,½,ß,É¤A[OK],ðfNfSfbfN,·,é•K— v,í, ,è,Ü,¹,ñõBfSfxfg f{fbfNfX,É^,·,é•ïõX,íõAfff>[]^ f[]][fx,ìfZfbfgfAfbfv f_fCfAf[]fo f{fbfNfX,Ä [OK] f{f^f“,¤‰Ý,³,ê,½žž“_,Ä“K— p,³,ê,Ä,¢,Ü,·õB
[fLfjf“fZf<]	[ODBC ff>[]^f[]][fx,fAfhf~fjfXfgfŒ>[]^ f_fCfAf[]fo f{fbfNfX,ð•Ä,¶,Ü,·õB[fLfjf“fZf<] ,¤'!ð,³,ê,½,Æ,µ,Ä,à¤A[ftf@fCf<ff>[]^ f[]][fx] f{fbfNfX,Ö,ì•ïõX,ížæ,è¤A,³,ê,È,¢ ,±,Æ,É'ÛÓ,µ,Ä,,¾,³,¢õB
[fwf<fv]	fwf<fv‰œ-È,ð•\ž!,µ,Ü,·õB

[ODBC fhf%ofoCfo] f^fu

[f]fv[f]V[f]“	[à-¾]
[ODBC fhf‰fCfo] f{fbfNfX	fRf“fsf... [f^,ÉfCf“fXfg][f<,³,ê,½ŒÂ]X,ì ODBC fhf‰fCfo,É,Â,‡,Ä]A- ¼’O]AfO[fWftf“]A‰oiŽÐ- ¼]Aftf@fCf<-¼]Aftf@fCf<]X]V“ú•t,ð•\ži,µ,Ü,·]B
[OK]	[ODBC ff][f^f][fX fAfhf~fjfXfgfŒ][f^] f_fCfAf]fO f{fbfNfX,ð•Â,¶,Ü,·]B
[fLfff“fZf<]	[ODBC ff][f^f][fX fAfhf~fjfXfgfŒ][f^] f_fCfAf]fO f{fbfNfX,ð•Â,¶,Ü,·]B
[fwf<fv]	fwf<fv‰æ-Ê,ð•\ži,µ,Ü,·]B

[fgfCE][fX] f^fu

ODBC fhf%o[Cfo f}fl|[fWff, a ODBC ŠÖ”, lŒÄ, Ño, µ, öfgfCE[fX (’ÇÖ) , ., é•ù-@, öZw’è, µ, Ü, ·B|ížfgfCE[fX]A^é”x, l, Y,]fgfCE[fX]A“ ® “I fgfCE[fX]A, Ü, ½, ífjfXf^f€ fgfCE[fX, öZw’è, Å, «, Ü, ·B

f1fvfVf#f“	à-¾
[fgfCE[fX, lžÅ]s]	fgfCE[fX, ö— LŒø, É, µ·AfgfCE[fX, öS]žn, ., éf^fCf~f“f O, öŒ^, ß, Ü, ·B, ± , è, ç, lrf“fgf [f, l]A]U’±, a]s, í, è, Ä, ç , È, ç, AE, «, É, l, Y]Y’è, Å, «, Ü, ·B [fgfCE[fX, µ, È, ç] , ö’l’ö, ., é, AE·Af}fVf“, Å]s, í, è, é, ., x, Ä, l]U’ ±, È, Å, ç , Ä]AfgfCE[fX, a]ížžž“ ® “I, ÉžÅ]s, ^, è, Ü, ·B [^é”x, l, YfgfCE[fX] , ö’l’ö, ., é, AE·AžY ‰ñ, l]U’± , ÉŒÀ, èfgfCE[fX, a]žÅ]s, ^, è]A, «, l]U’± , a]Ø’f, ., é, AEfgfCE[fX, a-³Œø, È, è, Ü, ·B “ ® “I, ÉfgfCE[fX, ö— LŒø, É, µ, Ü, ·B“ ® “I fgfCE[fX, l]A[ODBC ff [f^f]l[fX fAfhf~fjfXfgfCE[f^] f_fCfAf]fO f{fbfNfX, a]žl, ^, è, Ä, ç , è]Å’†, ÉžÅ]s, ^, è, Ü, ·B“ ® “I fgfCE[fX, l]A]U’±, l—L-³, È, ©, ©, í, ç, .— LŒø, È, Å, «, Ü, ·B, ± , è, öfNfSfbfN, ., é, AE·A[fgfCE[fX, l]žn] f{f^f“, a [fgfCE[fX, l]ž~] f{f^f“, È•l, í, è, Ü, ·B[fgfCE[fX, l]ž~] f{f^f“, öfNfSfbfN, ., é, ©·A[ODBC ff [f^f] [fX fAfhf~fjfXfgfCE[f^] f_fCfAf]fO f{fbfNfX, ö•Å, ¶, è, AE·A“ ® “I fgfCE[fX, a- ³Œø, È, è, Ü, ·B [f]fO ftf@fCf<, lfpfX] fgfCE[fX]l•ñ, l]ši”[ftf@fCf<, lfpfX, AEftf@f Cf<-¹/₄, ö•\ žl, µ, Ü, ·B VfXfef€]l•ñ, ©, çšù’è, lfpfX, AE ftf@fCf<-¹/₄ (sql.log) , a]žæ, ç, è, Ü, ., a]A•È, lfpfX, AEftf@fCf<- ¹/₄, ö”ü—l, ., é, ©·A[žQ]Æ] f{f^f“, öfNfSfbfN, µ, ÄftfHf<_, AEftf@fCf< ö’l’ö, ., è, ± , AE, Å]A•È, lftf@fCf<, öZw’è, Å, «, Ü, ·B f}fVf“, lftfHf<_, öZQ]Æ, µ, Ä]Afg]fO ftf@fCf<, lfpfX, AEftf@fCf<-
[žQ]Æ]	

¼,ð'í'ð,·,é,Æ,«,Éžg—p,μ,Ü,·□B
 [f]fXf^f€ fgfŒ[fX
 DLL] fgfŒ[fX,íŽA}s,Éžg—p,·,éftf@fCf<,ð
 ODBCTRAC.DLL
 ftf@fCf<^ÈŠO,ífgfŒ[fX DLL
 ,©,ç'í'ð,·,é,Æ,«,Éžg—p,μ,Ü,·□BODBC
 SDK ,É•t'®,·,é ODBCTRAC.DLL
 ftf@fCf<,ðAftŒ[fU],³I,ÓfjfXf^f€ DLL
 ,É'u,«Š·,l,ç,ê,Ü,·□BfjfXf^f€ DLL
 ,ífpfX,“,æ,Ñftf@fCf<-¼,ð“ü—
 í,·,é,©□A[DLL ,í'í'ð]
 f{f^f“,ðfNfŠfbfN,μ,ÄfjfXf^f€ DLL
 ,ð'í'ð,μ,Ü,·□B
 [DLL ,í'í'ð] fffBfŒfNfgfŠ\`¢,ðŽQ□Æ,μ,ÄfjfXf^f€
 fgfŒ[fX DLL ,ð'í'ð,·,é,Æ,«,Éžg—
 p,μ,Ü,·□BDLL
 ,ð'í'ð,·,é,Æ□A,»,ífpfX,Æftf@fCf<-¼,³
 [f]fXf^f€ fgfŒ[fX DLL] f{fbfNfX,É“ü—
 í,³,ê,Ü,·□B
 [OK] fgfŒ[fX,í]Ý'è,í•í□X,ð“K—
 p,μ,Ä,©,ç[ODBC ffŒ[f^fŒ[fX
 fAfhf~fjfXfgfŒ[f^] f_fCfAfŒfO
 f{fbfNfX,ð•Ä,¶,Ü,·□B
 [fLffff"Zf<] fgfŒ[fX,í]Ý'è,í•í□X,ð“K—p,¹,,É
 [ODBC ffŒ[f^fŒ[fX fAfhf~fjfXfgfŒ[f^]
 f_fCfAfŒfO f{fbfNfX,ð•Ä,¶,Ü,·□B
 [ODBC ffŒ[f^fŒ[fX fAfhf~fjfXfgfŒ[f^]
 f_fCfAfŒfO f{fbfNfX,ð•Ä,¶,,ÉŒAfgfŒ[fX,Ö,í•í□X“
 à—e,ð“K—
 p,μ,Ü,·□B•í□X,³^êŒØs,í,ê,Ä,¢
 ,È,“,é,í□A,±,íf{f^f“,³WŒF•ž,³,ê,Ü,·□B
 [fwf<fv] fwf<fv‰œ-È,ð•ž,μ,Ü,·□B

,±,jfŠfXfg,íADSН ,j-¼'О,Æ,»,{éfhf%oCfo,È,C[]Aft[]fU[] DSN ,ð,;,x,Ä•\
ž|,μ,Ü,·Bf+[]fU[] ff[]f^ f[]fX,É'í,μ,Äfhf%oCfoCEÄ—L,jff[]f^ f[]fX,lfZfbfgfAfbfv f_fCfAf[]fO
f{fbfNfX,ð•\ž|,·,é,É,íAft[]fU[] DSN ,ðf_fuf<fnfSfbfN,μ,Ü,·B

ŠÙ’¶,íff[]^f__fx,í__X,·,éfhf%o__Cf__o__A__L,íff[]^f__fx,ífZfbfgfAf__fv f__fCfAf__fo f_\{fbfNfX,ð__v,ž__l,·,é,É,í__A[__X__],ðfNf__SfbfN,__μ,Ü,·,·B__Í__U,Æ,È,éff[]^f__fx,ðf__Sfxfg f_\{fbfNfX,©,ç'Í'ð,__μ,__Ä,„,•K—v,„,·,è,Ü,·,·B

□V,μ,ff□[f^ f□[fX,δ'C‰Á],é,É,í□A['C‰Á],δfNfŠfbfN,μ,Ü,·□B[ff□[f^ f□[fX,í□V<K□)□→] f_fCfAf□fO
f{fbfNfX,³•\Ž|,³,ê,Ü,·□Bff□[f^ f□[fX,δ'C‰Á],éfhf‰ofCfo,δ'l'ð,μ,Ä [S®—¹],δ'l'ð,·,é,Æ□A,»,ífhf
‰ofCfoŒÅ—L,íff□[f^ f□[fX,íZfbfgfAfbfv f_fCfAf□fO f{fbfNfX,³•\Ž|,³,ê,Ü,·□B

Šù'¶,jff□[f^ f□[fX,đfŠfXfg f{fbfNfX,©,ç□í□œ,·é,É,í□A[□í□œ] ,đfNfŠfbfN,μ,Ü,·□B□í□œ,·éff□[f^ f□[fX,đfŠfXfg f{fbfNfX,©,ç'ł'đ,μ,Ä,„,•K—v,³, ,è,Ü,·□B

[ODBC ff][f^f][fx fAfhf~fjfXfgfŒ][f^] f_fCfAfO f{fbfNfX,ð•Â,¶.é,É,íA[OK]
,ðfNfŠfbfN,µ,Ü,·Bff[f^ f][fx fŠfXfg f{fbfNfX,É'í,·,é•íX,ð“K—p,·,é,%ç,ß,É [OK] ,ðfNfŠfbfN,·,é•K—
v,í,·,é,Ü,¹,ñBfŠfXfg f{fbfNfX,É'í,·,é•íX,íAff[f^ f][fx,ífZfbfgfAfbfv f_fCfAfO f{fbfNfX,Å [OK]
f{f^f“,‰,é,%ç,ß,É“K—p,·,é,Ä,ç,Ü,·B

[ODBC ff][f^ f\ [fX fAfhf~fjfXfgfŒ][f^] f_fCfAf\fO f{fbfNfX,ð•Â,¶,é,É,í\A[fLfff“fZf<]
,ðfNfŠfbfN,µ,Ü,·\B [fLfff“fZf<],³fNfŠfbfN,³,ê,Ä,à\Afff[f^ f\ [fX fŠfxfg
f{fbfNfX,Ö,ì•ï\X,ižæ,è\Á,³,ê,Ü,¹,ñ\B

,±,íƒ^fu,À¤Afwf<fv,ð•\Ž!;,é,É,í¤A[fwf<fv] ,ðfNfŠfbfN,µ,Ü,·¤B

,±,jfŠfXfg,íADSН ,j-¼'О,Æ,»,{éfhf%oCfo,ð,í,¶,ßAfVfXfef€ DSN ,ð,·,×,Ä•\ Ž|,μ,Ü,·BfVfXfef€ ff[f^ f\l fX ,É'í,μ,Äfhf%oCfoCEÅ—L,jff[f^ f\l fX,]fZfbfgfAfbfv f_fCfAf\]fO f{fbfNfX,ð•\Ž|,·,é,É,íAfVfXfef€ DSN ,ðf_fuf<fnfšfbfN,μ,Ü,·B

Šù'¶,ífVfXfef€ ff□[f^ f□[fX,í□\□¬,ð•í□X,;éfhf%oCfoŒÅ—L,íff□[f^ f□[fX,ífZfbfgfAfbfv f_fCfAf□fO
f{fbfNfX,ð•\Ž|,·,é,É,í□A[□\□¬] ,ðfNfŠfbfN,μ,Ü,·□B'Û,Æ,È,éfVfXfef€ ff□[f^ f□[fX,ðfŠfxfg
f{fbfNfX,©,ç'!ð,μ,Ä,"•K—v,¤,è,Ü,·□B

□V,μ,fVfxfef€ ff□[f^ f□[fx,ð'ç‰oÅ,;é,É,í□A['ç‰oÅ],ðfNfŠfbfN,μ,Ü,·□B[ff□[f^ f□[fx,í□V<K□i□¬]
f_fCfAf□fO f{fbfNfx,²•\ž|,³,ê,Ü,·□BfVfxfef€ ff□[f^ f□[fx,ð'ç‰oÅ,·éfhf‰oCfo,ð'l'ð,μ,Ä [š®—¹]
,ð'l'ð,·é,Æ□A,» ,ífhf‰oCfoŒÅ—L,íff□[f^ f□[fx,ífZfbfgfAfbfv f_fCfAf□fO f{fbfNfx,²•\ž|,³,ê,Ü,·□B

Šù'¶,]fVfXfef€ ff[]f^ f\][fX,ðfŠfXfg f{fbfNfX,©,çíœ,·é,É,íA[íœ]
,ðfNfŠfbfN,μ,Ü,·Bíœ,·éfVfXfef€ ff[]f^ f\][fX,ðfŠfXfg f{fbfNfX,©,ç'l'ð,μ,Ä,"•K—v,ª, ,è,Ü,·B

,±,íƒšFxg,íA[fƒ]f^ f\o[fX,í]éš] f{fbfNfx,Á•ž|,³,é,éftfHf< f_É,Á,¢,Ä\A,»,±,Éši”[,.³,é,½ftf@fCf DSN ,ÆftfufjtHf< f_,ð,.,x,Ä•ž|,μ,Ü,·Bftf@fCf DSN ,ðf_fuf:fNfšfbfN,·,é,Æ\Afhf%ofCfoŒÅ—L,íff\|f^ f\o[fX,í]fZfbfgfAfbfv f_fCfAf\ofo f{fbfNfx,³,é,Ü,·B

Šù'¶,jftf@fCf< ff[]f^ f[]fx,i[]¬,ð•í[]x,·éfhf%ofoCfoŒÅ—L,jff[]f^ f[]fx,jfZfbfgfAfbfv f_fCfAf[]fO
f{fbfNfX,ð•\ž|,·,é,É,i[]A[[]¬],ðfNfŠfbfN,μ,Ü,·[]B'[]Û,Æ,È,éftf@fCf< ff[]f^ f[]fx,ðfŠfXfg
f{fbfNfX,©,ç'l'ð,μ,Ä,"•K—v,ª, ,è,Ü,·[]B

□V,μ,ftf@fCf< ff□[f^ f□[fx,δ'ç‰Á,μ,Ü,·□B,±,]f{f^f“,δfNfŠfbfN,·,é,Æ□A[ff□[f^ f□[fx,]□V<K□]□→]
f_fCfAf□fO f{fbfNfx,³•\Z|,³,ê,Ü,·□B□V,μ,¢ftf@fCf< ff□[f^ f□[fx,δ'ç‰Á,·,éfhf%ofCfo,δ'l'ð,μ [ŽŶ,Ö]
,δ'l'ð,·,é,Æ□Aftf@fCf< DSN ,É'î,·,éfL□[f□□[fh,δŽw'è,Å,«,Ü,·□B

Šù'¶,]ff[]f^ f[]fX,ð[]í[]œ,µ,Ü,·[]B[·í[]œ] ,ðfNfŠfbfN,·,é'O,É[]A[]í[]œ,·,éftf@fCf< ff[]f^ f[]fX,ðfŠfxfg
f{fbfNfX,©,ç'l'ð,µ,Ä,"•K—v,³, ,è,Ü,·[]B

•\Z!'\t,¡ftfHf<f_,ð[]AODBC fAfhf~fjfXfgfCE[]f^,¡ŽÀ[]sŽž,É•\
ž|,:éŠù'èftfHf<f_,É[]Y'è,·é,É,í[]A[ftfHf<f_,¡[]Y'è] ,ðfNfŠfbfN,μ,Ü,·[]B

j!fŒf“fg ftfHf< f_ ,ð•\ž!,μ,Ü,·□B,» ,j%oº,jfEfBf“fhfE,É,í□AfJfŒf“fg ftfHf< f_ ,jftfuftfHf< f_ ,Æftf@fCf< DSN ,²•\ž!,³,ê,Ü,·□B□‰ŠÚ□Ý'è,Å,í□AfVfXfef€□î•ñ,ÉŽû,ß,ç,ê,½Šù'ëftfHf< f_ ,²•\ž!,³,ê,Ü,·□B

[ff][f^f][fx, i ê Š], É•\ž|, ^, ã, ½ftfHf<f_, ðA'¼ÚŒ»»Y, jftfHf<f_, i 1 , Åã, jftfHf<f_, É•í X, ;é, É, í A[1
, Åã, jftfHf<f_, Ö (fAfCfRf“)] , ðfNjŠfbfN, µ, Ü, · B

ftfHf<f_,í“à—e,ð•\ž!,·é,É,í[]A[ftfHf<f_] f{fbfNfx,ÉftfHf<f_,ífpfx,ð“ü—í,μ,Ü,·[]B[]â’ífpfx[]A,Ü,½,ífjfŒf“fg
ftfHf<f_,©,ç,í‘š’ífpfx,í,¢,.,ê,©,ð“ü—í,Å,«,Ü,·[]B

,±,ífŠfXfg,í[]AfRf“fsf...[]f^,ÉfCf“fxfg[]f<,³,ê,½ ODBC fhf‰fCfo,í-¼’O[]Afo[]fWftf“[]A‰oížD-
½[]Aftf@fCf<-¼[]AfŠfŠ[]fX,í“ú•t,ð•\ž|,μ,Ü,·[]B

fgfCE[fX,δ-³CE∅,E,·,é,ê,†,í,A[fgfCE[fX,μ,E,¢],δfNfŠfbfN,μ,Ü,·]B

f}fVf“,Ås,í,ê,é,; ,x,Ä,íÚ‘±,É,Â,¢,ÄAfgfŒ[fX,ðíŽžŽ©“®“I,ÉŽÅs,·,é,É,íA[í,ÉfgfŒ[fX]
,ðNfŠfbfN,µ,Ü,·B

fgfGCE[fX,ðŽY%oñ],í]Ú'±,ÉŒÀ,Á,AŽÀ[s,·,é]Û[‡,í]A[^ê“x,ì,ÝfgfCE[fX],ðfNjŠfbfN,μ,Ü,·]BŽY%oñ,í]Ú'±,³]Ø'f,·,é,ÆŒAfjfCE[fX,í-³Œø,É,È,è,Ü,·]B

[ODBC ff][f^ f\ [fX fAfhf~fjfXfgfCE][f^] f_fCfAf\fO f{fbfNfX,i•\ Žl't,ÉfgfCE[fX,ðŽÀ\s,·,é,É,íA[fgfCE[fX,ìŠjŽn],ðfNfŠfbfN,μ,Ü,·\B“® “IfgfCE[fX,íA\Ú'±,i—L-³,É,©,®,í,ç,,—LŒø,É,Å,«,Ü,·\B,±,ê,ðfNfŠfbfN,·,é,Æ\A[fgfCE[fX,ìŠjŽn] f{f^f“,²[fgfCE[fX,ì'âŽ~] f{f^f“,É•i,i,è,Ü,·\B[fgfCE[fX,ì'âŽ~] f{f^f“,ðfNfŠfbfN,·,é,©\A[ODBC ff][f^ f\ [fX fAfhf~fjfXfgfCE][f^] f_fCfAf\fO f{fbfNfX,ð•Â,¶,é,Æ\A“® “IfgfCE[fX,²-³Œø,É,È,è,Ü,·\B

f_jf_o ft_f@fCf<, lfpfX, Ef_ft_f@fCf<-¼, ð•l_oX., ,é, É, l_A[f_jf_o ft_f@fCf<, lfpfX] f{fbfNfX, Ef_ffL_fXfg, ð“ü—í, µ, Ü, ·B, ±, l_f{fbfNfX, l_A[f_jf_o ft_f@fCf<-¼, ð•l_oX., ,é, Ef_ft_f@fCf<, lfpfX, Ef_ft_f@fCf<-¼, ð•\ž|, µ, Ü, ·BfVfXf_ffe®•ñ, ©, çSù‘è, lfpfX, Ef_ft_f@fCf<-¼ (SQL.LOG), ^žæ, ç, è, Ü, ., ^A•È, lfpfX, Ef_ft_f@fCf<-¼, ð“ü—í, ,é, ©l_A[žQl_A] f{f^“f“, ðfNfSfbfN, µ, ÄftfHf_f_, Ef_ft_f@fCf<, ð'l_o, ,é, ±, Ef, Ål_A•È, lftf@fCf<, ðžw’è, Å, «, Ü, ·B

f}fVf“, lftfHf{_, ðŽQ[]E, µ, Ä[]Af[]fO ftf@fCf<, lfpfX, Eftf@fCf<-¼, ð'l'ð, ·, é, E, «, ÉŽg—p, µ, Ü, ·[]B

fgfŒŒ[fx,íŽAſ,Éžg—p,·,éftf@fCf<,ð ODBCTRAC.DLL ftf@fCf<ÈŠO,fgfŒŒ[fx DLL
,©,ç'!ð,·,é,É,íOA[fJfxf^f€ fgfŒŒ[fx DLL] f{fbfNfx,É,» ,ífpfx,“,æ,Nftf@fCf<-¼,ð“ü—í,μ,Ü,·BODBC SDK
,É•t‘®,·,é ODBCTRAC.DLL ftf@fCf<,ðAftf[fu][,·! ,Öfjfxf^f€ DLL ,É'u,«š·,!,ç,ê,Ü,·Bfjfxf^f€ DLL
,ífpfx,“,æ,Nftf@fCf<-¼,ð“ü—í,·,é,©OA[DLL ,í'!ð] f{f^f“,öfNjsfbfN,μ,Afjfxf^f€ DLL ,ð'!ð,μ,Ü,·B

ffffBfŒfNfgfŠ\s\‘¢,ðŽQŒÆ,µ,Äf]fxf^f€ fgfŒŒ[fX DLL ,ð'l'ð,·,é,É,íŒA[DLL,]l'ð] ,ðfNfŠfbfN,µ,Ü,·ŒBDLL
,ð'l'ð,·,é,ÆŒA,» ,ìfpfx,Æftf@fCf<-½,³ [f]fxf^f€ fgfŒŒ[fX DLL] f{fbfNfx,É“ü—í,³,ê,Ü,·ŒB

fjfŒ [fx,Y'•X,Z6,-“ü,A[ODBC ff [f^ f [fx fAfhf~fjfXfgfŒ [f^] f_fCfAf fO
f{fbfNfx,,¶,é,A[OK],fNfŠfbfN,µ,Ü,·B

fgfŒŒ[fx,ì]Ý‘è•ï]X,ðžó,“ü,ê,,É]A[ODBC ffŒ[f^ fŒ[fX fAfhf~fjfXfgfŒŒ[f^] f_fCfAfŒfo
f{fbfNfX,ð•Â,¶,é,É,í]A[fLffff“fZf<],ðfNfŠfbfN,µ,Ü,·ŒB

[ODBC ff][f^f][fx fAfhf~fjfXfgfŒ][f^] f_fCfAf fo
f{fbfNfX,đ•À,¶,,ÉAfgfŒ][fX,ìÝ'è•ïX,đŽó,¬“ü,ê,é,ê,íA[X]V]
,đfNfŠfbfN,µ,Ü,·B•ïX,³ê,Øs,í,ê,Ä,¢,È,¬,ê,íA,±,íf{f^f“,íWf•\Ž;,³,ê,Ü,·B

[f] [ft] [f@] [fC] [f<] [ff] [f\] [f^] [f\^] [fX] [f^fu]

fIfvfVftf“

$\square \mathbf{a}^{-3/4}$

[f ^t f@fCf< ff ^o [f^ f ^o [fX] f{fbfNfX	[ff ^o [f^ f ^o [fX, i ^o ê ^o Š] f{fbfNfX, Ä•\ ž!, ^, ê, ēftfHf< f_, É, Ä, ç, Ä•A, », ± , Éši”[., ^, ê, ½ftf@fCf< DSN , ÄftfTfuf ^t fHf< f_, ð, ., x, Ä•\ ž!, µ, Ü, · BDSN , ðf_fuf< fNfŠfbfN, ., é, Äff ^o [f^ f ^o [fX, É•Ú±, µ, Ü, · B [ff ^o [f^ f ^o [fX, i ^o ê ^o Š] [ff ^o [f^ f ^o [fX, i ^o ê ^o Š] , É•\ ž!, ^, ê, ½ftfHf< f_, ðŒ»»Ý, iftfHf< f_, i 1 , Ä•ä, iftfHf< f_, É• i ^o X, µ, Ü, · B [DSN-½] ftf@fCf< ff ^o [f^ f ^o [fX fŠfXfg’t, É’l’ð, ^, ê, ½ftf@fCf< DSN - ½, ð•\ ž!, ., é, ©•A, Ü, ½, i ^o V, µ, çftf@fCf< DSN -½, ð”ü—í, µ, Ü, · B [V<K ^o i ^o ¬] ff ^o [f^ f ^o [fX, ð’ç‰Ä, ., éfhf ‰oÄ, µ, Ü, · B, ± , j{f{f^ f”, ðfNfŠfbfN, ., é, Ä•A[ff ^o [f^ f ^o [fX, i ^o V<K ^o i ^o ¬] f_fCfAf ^o f{fbfNfX, æfhf‰ofCfo, jfŠfXfg, É, Ä, ç , Ä•\ž!, ^, ê, Ü, · B, i ^o V, µ, çftf@fCf< ff ^o [f^ f ^o [fX, ð’ç‰Ä, ., éfhf ‰ofCfo, ð’l’ð, µ, Ü, · B[ZÝ, Ö] , ð’l’ð, ., é, Ä•Aftf@fCf< DSN , É’l’, ., éfL ^o [f ^o [f ^o [fh, ðžw’è, Ä, «, Ü, · B [OK] [ff ^o [f^ f ^o [fX, i ^o ’l’ð] f_fCfAf ^o f{fbfNfX, Ä•ð, ¶AfŠfXfg’t, ÄfhfCf ‰ofCfg•\ž!, ^, ê, ½ftf@fCf< ff ^o [f^ f ^o [fX, i ^o V, Ü, ½, í [DSN -½] f{fbfNfX, É”ü —í, µ, ½ftf@fCf< ff ^o [f^ f ^o [fX, É•Ú± , µ, Ü, · B [ftf@fCf< ff ^o [f^ f ^o [fX] f{fbfNfX, É’l’, ., é• i ^o X, ð”K— p, ., é, ½, ß, É•A[OK], ðfNfŠfbfN, ., é• K
--	---

—v,í, ,è,Ü,¹,ñ[BfŠfXfg
 f{fbfNfX,É'í,·,é•ï[X,í[A[ff][f^ f]\n
][fX,]fZfbfgfAfbfv] f_fCfAfO
 f{fbfNfX,Å [OK] f{f^f",²
 %oÝ,³,é,½žž"_,Å"K—p,³,é,Ä,¢,Ü,·B
 [fLffff"Zf<]
 ftf@fCf< ff[f^ f][fX,É]Ú'±,¹,,É
 [ff][f^ f][fX,í'í'ð] f_fCfAfO
 f{fbfNfX,ð•Å,¶,Ü,·B[fLffff"Zf<]
 ,²'í'ð,³,é,½,Æ,μ,Ä,àAftf@fCf<
 ff[f^ f][fX,É]Ú'±,¹,,É
 fšfXfg,Ö,i•ï[X,ížæ,èA,³,é,Ü,¹,ñ[B
 fwf<fv%oæ-È,ð•ž,μ,Ü,·B

[f}fVf" ff[f^ f][fX] f^fu

ft[fU][DSN ,Ü,½,íVfXfef€ DSN ,ðž,Åff[f^ f][fX,É]Ú'±,μ,Ü,·Bf}fVf" ff[f^ f][fX,í,±
 ,]f}fVf",ÉŒÅ—L,Å, ,èA \llcorner L,³,é,Ü,¹,ñ[Bf[fU][ff][f^ f][fX,í,±,]f}fVf",]f[fU][ÉŒÅ—L,Å,·B,±
 ,]f}fVf",i,·,×,Ä,]f[fU][A,Ü,½,íVfXfef€-fCfh fT[frfX,íVfXfef€ ff[f^ f][fX,ðžg—p,Å,«,Ü,·B

f}fVfVf#f"	à-¾
[f}fVf" ff[f^ f][fX]	ft[fU][DSN ,ÆfVfXfef€ DSN ,i^é f{fbfNfX — (DSN ,i- ,½'Ø,Æf^fCfv,ðšÜ,Þ)BDSN ,ðf_fuf<fnfšfbfn,·,é,Æ ff[f^ f][fX,É]Ú'±,μ,Ü,·B
[V<K]i→	□V,μ,ftf@fCf< ff[f^ f][fX,ð'ç %oÅ,μ,Ü,·B,± ,]f{f^f",ðfnfšfbfn,·,é,Æ[A[ff][f^ f][fX,íV<K]i→] f_fCfAfO f{fbfNfX,²•\n ž,³,é,Ü,·B]V,μ,¢ftf@fCf< ff[f^ f][fX,ð'ç%oÅ,·,éfhf %o]Cfo,ð'í'ð,μ,Ü,·B[žY,Ö] ,ð'í'ð,·,é,ÆADSN ,É'í,·,éfL[f][f][fh,²"K]Ø,Å, ,é,± ,Æ,ðf'fFfbfn,Å,«,Ü,·B
[OK]	ff[f^ f][fX,í'í'ð] f_fCfAfO f{fbfNfX,ð•Å,¶,é,Æ]AfšfXfg't,Åfnf Cf%o]Cfg•ž,³,é,½ftf@fCf< ff[f^ f][fX,É]Ú'±,μ,Ü,·B [f}fVf" ff[f^ f][fX,É]Í,·,é•ï[X,ð"K—p,·,é,½,ß,É [OK],ðfnfšfbfn,·,é•K— v,í, ,è,Ü,¹,ñ[BfšfXfg,É'í,·,é•ï[X,íA ff[f^ f][fX,]fZfbfgfAfbfv] f_fCfAfO f{fbfNfX ,Å [OK] f{f^f",²%oÝ,³,é,½žž"_,Å"K— p,³,é,Ä,¢,Ü,·B ftf@fCf< ff[f^ f][fX,É]Ú'±
[fLffff"Zf<]	

, „, É A[f f] [f ^ f] [f X, l' l' ð]
f _ f Cf Af f o
f {fb f Nf X, ð • Ä, ¶, Ü, · B [f L f f f " f Z f <]
, „ l' ð, „, ê, ½, Æ, µ, Ä, à A f } f V f " ff [f ^
f] [f X
f Š f X f g, Ö, l • ï X, í Ž æ, è A Á, „, ê, È, ¢, ±
, Æ, É, Ê, Ó, µ, Ä, „, ¾, „, ¢ B
[fwf < fv] fwf fv % o æ - È, ð • Í Ž, µ, Ü, · B

,±,ƒſFxfg,í█A[ff█[f^f█]fx,í█é█š] f{fbfNfx,Ä•\ž|,³,é,éftfHfſ,É,Ä,¢,Ä█A,»,±,Éši”[,³,é,½ftf@fCf^k DSN
ÆfTfuftfHfſ,ð,·,x,Ä•\ž|,μ,Ü,·BDSN,ðf_fufNfSfbfN,·,é,Æff█[f^f█]fx,É█Ú±,μ,Ü,·B

fjfŒf“fg ftfHf<_,ð\|Z|,µ,Ü,·|B,»,%o°,j|EfBf“fhfE,É,í|AfjfŒf“fg ftfHf<_,j|TfufjtHf<_,Æftf@fCf^{DSN},^•\|Z|,³,ê,Ü,·|BfefLfXfg f{fbfNfX,|%oE'¤,É, ,é%o°Œü,<-^ó,ðfNfŠfbfN,·,é,Æ|A,»,j|ffBfŒfNfgfŠ\|‘¢'S|,^•\|Z|,³,ê,Ü,·|B

[ff][f^f][fX,iêš] f{fbfNfx,É•\ž|,³,ê,½ftfHf<f_,ð]A'¼ÚŒ»]Y,]ftfHf<f_,] 1
,Â]ä,]ftfHf<f_,É•í]X,μ,Ü,·]B

ftf@fCf< ff[]f^ f[]fX fSfXfg't,É'I'ð,³,ê,½ftf@fCf< DSN -¼,ð•\Z!;,é,©[]A,Ü,½,í []V,μ,¢ftf@fCf< DSN -¼
,ð“ü—í,μ,Ü,·[]B

fšfXfg't, ÅfnfCf%ofC fg•\Z! ,³, ê, ½ftf@fCf< ff[]f^ f[]fx, É[]Ú'±, ;, é, © , Ü, ½, í [DSN -½] f{fbfNfx't, É“ü—í, µ, Ü, ·[]B

□V,μ,ftf@fCf< ff□[f^ f□[fx,δ'ç‰Á,μ,Ü,·□B,±,]f{f^f“,δfNfŠfbfN,·,é,Æ□A[ff□[f^ f□[fx,]□V<K□]□→]
f_fCfAf□fO f{fbfNfx,³,ê,Ü,·□B□V,μ,¢ftf@fCf< ff□[f^ f□[fx,δ'ç‰Á,·,éfhf%ofCfo,δ'l'ð,μ,Ü,·□B[ZÝ,Ö]
,δ'l'ð,·,é,Æ□Aftf@fCf< DSN ,É'î,·,éfL□[f□□[fh,δžw'è,Å,«,Ü,·□B

[ff][f^ f][fX, i' i' ð] f_fCfAfO f{fbfNfX, ð•Â, ¶, , É AfŠfXfg't, ÅfnfCf%o fCf g•\Z|, ^, ê, ½ftf@fCf< ff][f^ f][fX, É Ú'±, ·, é, ©, Ü, ½, í [DSN -½] f{fbfNfX't, É"ü—í, µ, Ü, ·B

[ftf@fCf< ff][f^ f][fX] fŠfXfg, É' i, ·, é•í X, ð"K—p, ·, é, ½, ß, É [OK] , ðfNfŠfbfN, ·, é•K—v, í, , è, Ü, ¹, ñ BfŠfXfg, É' i, ·, é•í X, í A[f f][f^ f][fX, lZfbfgfAfbfv] f_fCfAfO f{fbfNfX, Å [OK] f{f^ f", ^, %o Y, ^, ê, ½ Zž", Å"K—p, ^, ê, Ä, ¢, Ü, ·B

ftf@fCf< ff[f^ f\ [fX,ÉÚ'±,¹, ,É [ff[f^ f\ [fX,í'l'd] f_fCfAf\ fO
f{fbfNfX,ð•Ä,¶,Ü,·BfLfff"Zf<,²'l'ð,³,ê,½,Æ,µ,Ä,àAf}fVf" ff[f^ f\ [fX fŠfXfg,Ö,í•íX,íŽæ,èÁ,³,ê,È,¢
,±,Æ,É'Ó,µ,Ä,,³/⁴,³,¢B

ft[[fU][DSN ,ÆfvfXfef€ DSN ,l^é— (DSN ,l-¼'0,Æf^fCfv,ðŠÜ,p) BDSN ,ðf_fuf<fnfŠfbfN,·,é,Æ ff[[f^ f[[fX,É[]Ú±,μ,Ü,·B

ÓV,µ,f}fvf“ ff[f^ f[X,ð'Ç‰Å,µ,Ü,·B,±,]f{f^f“,ðfNfŠfbfN,·,é,ÆA[ff[f^ f[X,i]V<K]→]
f_fCfAf]fO f{fbfNfX,³•\Z|,³,é,Ü,·B]V,µ,¢t[fU][ff[f^ f[X,Ü,½,ífvfXfef€ ff[f^ f[X,ð'Ç
‰Å,·,éfhf‰fCfo,ð'l'ð,µ,Ü,·B[ZY,Ö],ð'l'ð,·,é,ÆADSН,É,·,éfL[fh,³“K]Ø,Å, ,é,±
,Æ,ð'fffbfN,Å,«,Ü,·B

[ff][f^f][fX,i'õ] f_fCfAf]fO f{fbfNfX,ð•Â,¶,,É]A]fSfXfg't,Åf]nfCf%o]fCf]g•\Z!,³,ê,½ftf@]fCf< ff][f^f]\f][fX,É]Ú'±,μ,Ü,·]B

[f}fVf" ff][f^f][fX] fSfXfg,É]i,·,é•í]X,ð"K—p,·,é,½,ß,É]A[OK],ðfNfSfbfN,·,é•K—v,i,·,è,Ü,¹,ñ]BfSfXfg,É]i,·,é•í]X,í]A[f]f][f^f][fX,]fZfbfgfAf]bfv] f_fCfAf]fO f{fbfNfX,Å [OK] f{f^f",³,ê,½Ý,³,ê,½Zž",Å"K—p,³,ê,Ä,¢,Ü,·]B

ftf@fCf< ff□[f^ f□[fX,É□Ú'±,¹, ,É [ff□[f^ f□[fX,í'l'd] f_fCfAf□fO
f{fbfNfX,ð•Ä,¶,Ü,·□B,à,µfLfff"fZf<,²'l'ð,³,ê,½,Æ,µ,Ä,à□Af}fVf" ff□[f^ f□[fX
fšfXfg,Ö,í•í□X,ížæ,è□Á,³,ê,È,¢,±,Æ,É'□Ó,µ,Ä,,¾,³,¢□B

API

• ɿŽšfZfbfg

“KtfŒfxf

fAfvfŠfP[fVf#f“, l’†, É, íA^ê’è, l<@”\fŒfxf<, Ü, ½, í“KtfŒfxf<, ðfTf|fg, ·, éfhf%ofoCfo, l, Ý, ðŽg—p, ·, é, à, l, ¨, , è, , Ü, ·B, ½, Æ, l, lAfhf%ofoCfo, aff|f^ f\|fX, Ö, lfpfXf|fg, ðft|fU|l, É—v_l, Å, «, é, ±, Æ, ð•K—v, Æ, ., éfAfvfŠfP[fVf#f“, ¨, , è, Ü, ·B, ±, l<@”\, íAAPI, lŒfxf< 1 “KtfŒfxf<, ÉŠÜ, Ü, è, Ä, ¢, Ü, ·B

Še ODBC fhf%ofoCfo, íA3, Å, l API fŒfxf< (fRfA|AfoŒfxf< 1|AfoŒfxf< 2), l, ¢, ., è, ©, Æ|A3, Å, l SQL •¶-@ (Å|¬AfRfA|AŠg’£), l, ¢, ., è, ©, É“K‡, µ, Ä, ¢, Ü, ·Bfhf%ofoCfo, íA, », è, ¼, è, l•W|€fŒfxf<, æ, è, à|ä, É, éfŒfxf<, l<@”\, ð^ê•”fTf|fg, ;, è, ±, Æ, ¨, , è, Ü, ·B

ff[]f^ f[]fx

ff[]f^ f[]fx,Æ,í[]Aft[]fU[],ðfAfNfZfX,µ,æ,¤,Æ,·,éff[]f^,»,í,à,í,Æ[]A,»,íff[]f^,ðŽæ“³/₄,·,é,½,ß,É•K—v,È[]í•ñ,í—½•û,ðŽw,µ,Ü,·[]B^È%oº,Éff[]f^ f[]fx,í—á,ðŽ¡,µ,Ü,·[]B

- SQL Server ff[]f^fx[]fx[]A,»,ê,²•Ù‘¶,³,ê,Ä,¢,éFT[]fo[][]A,»,ífT[]fo[],ðfAfNfZfX,·,é,½,ß,ÉŽg—p,·,éflfbfgf[]fN
- fAfNfZfX,µ,½,¢ dBASE ,È,C,íftf@fCf<,ðŠÜ,þftfHf<f_

DBMS

ff[]f^fx[]fxS̄C—□fVfxfef€,í—¤Cé□Bff[]f^,í□□—□A•¤í□A€Ȳö□A□X□V□Ažæ“¾,ö□s,¤,½,ß,Éžg—p,·,éf^ftfgfEfFfA,í,±,Æ,Å,·□B

DDL

ff[]f^'è<Œ³/Œê,ì—ªŒêŒff[]f^'è<ŒfufWfFfNfg,â,»,ì'®Œ«,ð'è<'·é,½,ß,ÉŽg—p,³,ê SQL
fXfeŒ[fgfŒfg,ì,±,Æ,Å,·ŒB,½,Æ,Œ,ŒACREATE TABLEŒADROP VIEWŒAGRANT ,Œ,Œ,ŒfXfeŒ[fgfŒfg,Œ,±,œ,Œ,Œ,Œ,ŒB

DLL

f_fCfif~fbfN fŠf“fN f%oCfuf%ofoš, i—œêB<œ’È, jf^fXfN, ðžÀs, ., é, ½, ßA, ¢, , Å, ©, jfAfvfŠfP[fVf+f“, Åžg
—p, ³, ê, é 1 ‘g, Ÿ, jf<œlf`f“, i, ±, œœBODBC fhf%oCfo, à DLL , i 1 , Å, Å, ·œB

DML

ff[]f^'€]iŒ¾Œê,]—ªŒê]Bff[]f^,ð'€]ì,·,é,½,ß,ÉŽg—p,³,ê,é SQL fXfe[]fgf[]f“fg,]±,Æ,À,·]B,½,Æ,],]AUPDATE]AINSERTE]ADELETE ,Ê,Ç,]fXfe[]fgf[]f“fg,²,±,ê,É, ,½,è,Ü,·]B

ODBC

fílólfvf" ffólf^fxólfX frflfNfefBfrfefB, l-aŒêBfAfvfŠfPólfVf†f", a SQL , ð•Wó€Œ³/Œê, Æ, µ, Äžg—
p, µ, ÄœAfffólf^, ÖfAfNfZfX, ·, é, ±, Æ, ð‰oÂ"\", É, ·, é, ½, ß, jfhf%ofoCfo f}flólfWff, Æ ODBC fhf%ofoCfo, l'óól, Ä, ·óB

ODBC f}fI[fWff

ODBC f}fI[fWff

ODBC fhf‰fCfo

Excel ,í,æ,¤,È ODBC 'î‰ožfAfvfŠfP [fVf#f",¤"Á'è,íff [f^ f [fx,ðfAfNfZfX,·,é,½,ß,ÉŽg—p,·,é DLL ,í,± ,Æ,Å,· BSQL Server ,í,æ,¤,Èff [f^fx [fxŠç— fVfXfef€ (DBMS) ,Å,í A,»,ê,¼,ê^Ü,È,éfhf‰fCfo,¤•K— v,É,È,è,Ü, B

SQL

□\`f%o»fNfGfŠ[]Œ¾Œê,¡—œêŒffŒf^,¡žœ“¾ŒAŒXŒVŒAŠÇ—Œ,Œs,Œ½,Œžg—Œp,ŒéŒ¾Œê,Œ±,ŒÆ,ŒÅ,ŒŒB

SQL fXfe\fgf\“fg

SQL, ÅŒ, ©, ê, Ä, ç, éfRF}f "fh[ÅA, Å, Ü, è, ^" È, ÈfNfGfS[,ÆŒÄ, î, ê, é, à, ï, Å, · BSQL
fXfe[fgf]f "fg, È, È[ASELECT] [ADELETE] [ACREATE TABLE], ï, æ, æ
, È[AŽÀ]s, ., é'€]ì, ðŽw'è, ., é, à, ï, å[AŽÀ]s, ., é'€]ì, l'íÛ, Æ, È, éfe[fuf<, â—ñ, ðŽw'è, ., é, à, ï]A, », ê, È'€]ì, È"K
—p, , ê, é[ðŒ], ðŽw'è, ;, é, à, ï, È, Ç, , ê, Ü, · B

•ÍŠ·flfvfVf+f“

fgf%o f“fXfce[f^,äff][f^,ð•íš·,·é•û-@,ðžw'è,·éflfvfVf+f“,í,±
,Æ,Å,·[]B,½,Æ,í,í[]A•íš·flfvfVf+f“,í't,É,í[]Afgf%o f“fXfce[f^,ä^Û,È,é•¶žšfZfbfg,íšÔ,Å•¶žš—
ñff][f^,ð•íš·,·é,Æ,«[]A'íÛ,Æ,È,é•¶žšfZfbfg,ðžw'è,·é,à,í,ä, ,è,Ü,·[]B,Ü,½[]A^Ã[]t‰»,â^Ã[]t‰»,í
‰oðœ,í,½,ß,Éžg—p,·éflL[],ðžw'è,·é,à,í,à, ,è,Ü,·[]B

f gf%o f“f X f CE □ [f ^

Access ,í,æ,¤,ÈfAfvfŠfP□[fVf#f“,Æff□[f^ f□[fX,íŠÔ,Å^ø,«“n,³,ê,é,·,×,Ä,íff□[f^,ð•íš·,·,é,½,ß,í DLL ,í,±,Æ,Å,·□Bfgf%o f“f X f CE □ [f ^,í□Å,à^é”È“í,Èžg—p•û-@,Æ,µ,Å□A^Ü,È,é•¶žšfZfbfg,íŠÔ,Å•¶žš—ñff□[f^,ð•íš·,·,é,Æ,¢,¤,à,í,², ,è,Ü,·□B,Ü,½□Afgf%o f“f X f CE □ [f ^,É,æ,è□A^Ã□t‰o»,Æ^Ã□t,í‰oð□œ□A^³□k,Æ^³□k,í‰oð□œ,È,C,ð□s,¤,±,Æ,à,Å,«,Ü,·□B

