

Metal Knights 95

Copyright 1996-97 David Vincent and KnightSoft

from the original:
Metal Knights

Copyright 1993-95 David Vincent



What is Metal Knights

Metal Knights 95 is a strategy game in which you have to build and rule an empire. You usually play against friends or even people you do not know over the Internet. The original game, Metal Knights, was designed a few years ago as a DOS application. The games were then played on a Bulletin Board System (BBS). The game was completely rewritten in 1996 and is now a Windows 95 32-bit application with full Internet support, with many new features and is very addictive and fun to play !

If you haven't already, check out the Metal Knights Home Page!
on the web <http://www.info.polymtl.ca/~skyven/metal>

Take a look at [how the game is played](#) to find out more about the game itself.

Metal Knights is a shareware application. It is the result of a lot of efforts and would not have reached this far without the financial support of players since 1993. If you like the game, please [register](#) it! The author has set the price so low that everybody could give his/her own contribution. Once you register your copy of Metal Knights, you gain full access to the game as well as ALL FUTURE VERSIONS!

Disclaimer

The authors, David Vincent, also known as Skyven, and KnightSoft, provide this product as is and are in no way liable for the behavior or the unavailability of the product or the services provided. They also reserve the right to refuse access to the NetMetal Server or to interrupt the service if they feel the need to.

Game Historic

At the end World War III, the superpowers were left decimated. Only a few survived the nuclear exchanges... Year 2012: you are the leader of a nation rising from the ashes of the world. Wrecked lands are now ready to be conquered. These lands are inhabited by starving people, contain the natural resources your empire will need, and await a leader who will take charge and put the economy back together.

It is up to you to move into these chaotic lands before other armies, also looking for power, claim them for their own greedy empires!

To do so, you start with about \$200. First you have to establish a base at a strategic location. Then you must train soldiers and send them into the field, to conquer cities and collect taxes. Use bulldozers to harvest the world's natural resources, trucks to transport iron, gold and wood to the cities where you can sell them for profit!

Adding to the challenge, you will need to manage your cities efficiently in order to gain a military advantage over your opponents. Investing money in science leads to more advanced units, which are crucial in winning the game and achieving fame. Good luck, mighty Metal Knight!

KnightSpy

KnightSpy is a tiny application that stays in memory as a tray icon. KnightSpy takes less than 40k of memory and informs you of your Metal Knights games!

When loaded, the Metal Knights logo appears on the tray. If the NetMetal Server can not be reached (if your computer is not currently connected to the Internet for example) the logo is in black and white. Otherwise, it appears in colors. If some of your games have changed turn since your last played, it shows the number of games that are ready to be played!

Network Connection

KnightSpy will poll for this connection to be active. When active, it will then query the NetMetal Server about your games. To keep the server fast, you may not set a poll delay smaller than 10 minutes. 15-20 minutes is suggested.

Update

Do not wait for the next timer query and check the Server right now.

Play

Launch the Metal Knights application and open the selected game!

Registering Metal Knights

***YES! I like the game and I would like to help with it's development by registering!
How much does it cost?***

Well... here's the deal!

The game was made by gamers for gamers, not for money but for the pleasure of playing it with friends! The author wishes that everyone could play his game while still having enough money to be able to continue developing and maintaining the game and the server. Many people wrote to me saying MK is really a great game, but I will not ask for the price usually found on such a game. So here it is, go ahead, **give what you think the game is worth! or what you are ready to give for it**, that's it! You will be registered on the NetMetal Server and gain full access to it by sending at least \$12 US or 15\$ Canada (That's mainly for broke students :)! Now what do you say?!

Metal Knights will be registered to the name you write on the form below ONLY. (ONLY ONE NAME PER FORM PLEASE) It is NOT another version but a code that will register your name and any version you have on the NetMetal Server... giving you full access! By registering, you support Shareware authors so that they may continue to develop more great and inexpensive products. This registration IS ALSO VALID FOR ALL FUTURE VERSIONS of Metal Knights!

You may pay with a money order, or a check from a Canadian or American Bank payable to David Vincent. For other countries, you may use a VISA credit card (ask me by email first!). A money order in US money (ask at your local post office) is preferable but you may need to send cash. In this case, let me remind you that **you** take a risk, make sure the content is not visible from outside the envelope or I may not receive it. (Yes, there are cheap people who will steal even a \$1)

To make things go as fast as possible, make sure you entered your real name correctly in the Settings menu. If there is mistake do the following to correct it, log onto the NetMetal Server as usual and then go to the Internet menu and then the Settings menu. Removing the check there will allow you to change the values. Click **Update** to save your settings on the server. The Update button will not appear if you are not connected to the server.

For Those Registered Players Out There : If you registered the game previously (DOS version), log onto the NetMetal server (if it tells you that you are an unregistered player) then, email me your full name and alias so that I may register you on the NetMetal Server. You may currently reach me at skyven@info.polymtl.ca. See the Metal Knights Home Page for more details.

[Click here to jump to the Registration Form](#)

Metal Knights Registration Form

Send this form filled as soon as possible to:
(Click the Print button above)

David Vincent
10 ch RiverSide
Grand-Mere, PQ, CANADA
G9T 5K4

Metal Knights Registration: \$ _____ US (or _____ \$ CDN)
(See previous text for price)

Your name (real name): _____

Your alias (login on NetMetal): _____

Complete Address: _____
(including country) _____

Zip Code: _____ Date: __/__/__ (YY/MM/DD)

E-Mail _____

Phone Number: (_____) _____ - _____

Comments: _____

No Help Available

No help is available for this dialog box.

If you absolutely need help with this window, please ask the author (See The Metal Knights Home Page on the Web) and chances are that it will be added to the help menu in the next release.

Playing The Game

Metal Knights 95 is a multi-player strategy game that was designed to be intuitive and as easy to play as possible. The game connects by itself to the [NetMetal Server](#) and shows what games are started, all you have to do is to click on a game, join it and play in it! You may have to **Create** a new game. (If all the current games are full!)

Metal Knights is a turn-based game. That means that you move your units, and then the other players make their moves before you play again. A turn may last up to 24 hours but could be much shorter. It takes between 5 and 10 minutes to play a turn so feel free to play in more than one game at a time if you want to play a bit longer! :) The game is rather convenient, you play a little at a time, at any time of the day! Keep in mind that at first, your empire is quite small and there is not much to do until 4 or 5 turns into the game. After 15-20 turns, your empire may get very large and playing your turn may take you lots of time to complete since you will have to manage a very large number of cities and units. It is a good idea not to join games on the same day as you will eventually have many games that take a long time to play later on.

Learning the game is not very difficult... but mastering it is! I suggest that you start a local game and play against yourself to see what it looks like. After that, follow the Tutorial to learn the few basic moves and try all the features that are available. Then it's up to you to get to the master the game, to become the Metal Knight in the Metal Knights Hall of Fame!

Quick Start : Tutorial Step 1/5

Get into the Action

Once you start the application, you see the title screen. Click on **Start** Local Game. Now click **Add** to add a new player to the game, enter your name, click **OK** then **Start**. Now, the battlefield selection screen appears. Scroll down and **Select** the *Hirudo* battlefield.

Study the field, you can see it entirely as a map in the World Map window to the right of the screen.

Tip : Resize the Game window and the World Map window as you like. Use the **I** and **O** keys to zoom in or out as you like.

Use the  button above to continue...

Quick Start : Tutorial Step 2/5

You should install your base near many towns, roads, and natural resources. Position the cursor where you want to place your base and hit the **B** key. Then hit ENTER to access the base menu. Select Ground Army and **Recruit a Soldier** unit. The **Soldier** unit icon will blink over the base icon. You can move the unit towards a city with the arrow keys or by clicking beside the unit. Notice that the unit may make up to 4 moves. Depending on the ground type, it costs between 1 and 3 movement points to move a unit from one square to another. When you reach a city, you can claim it as part of your empire by moving your unit onto its icon, the city then belongs to you.

Here's what a city looks like:



Grass



Forest



Snow



Desert

See [Special Military Units](#) for a brief description of the units.

Quick Start : Tutorial Step 3/5

You enter the city's menu automatically. Change the city's name, or the tax rate to see how it affects the revenue or the population growth. There are already 4 food units in the city, so you don't need to buy a farm for now, but lets buy one to see... Close the City window and take a look at the farm you just built on the field (usually located on the right side of the city). Repeat the whole process from your base to conquer as many cities as possible as you will collect their taxes later.

When a unit has used all of its movement points, you can't do anything with it until the next turn.

Quick Start : Tutorial Step 4/5

Go back to the Base's menu and buy a **Bulldozer**. Move it alongside the base and hit **R** while it blinks. A road just appeared bellow your unit! Move it towards a natural resource (mine, wood, oil) while constructing pieces of road. Now you may buy a **Truck** in the base's menu, and send it to the natural resource. In the mine's menu (sawmill, or oil well) select **Load Truck** and observe the truck. Later you can drive the fully loaded truck back to a city to sell its contents. Here's what a resource looks like:



Grass



Forest



Snow



Desert

Finally type **E** to end this turn. You will see a report with the information on the cities you have. Click **OK**. Your units start again with the same number of movements they had when you bought them. Hit ENTER with the cursor on them to make them blink, then you can move them.

See [Special Military Units](#) for a brief description of the units.

Quick Start : Tutorial Step 5/5

Notice that when the cursor is above a city, unit or base you see information on that unit in the Status window. You also see what units are in a city through a radar box of that window. You may select a particular unit in a city by right-clicking on that city. A pop-up menu will show up.

The Management Lab is quite useful to manage your cities, units and resources quickly and efficiently. Toggle it with the **V** key. If you have enough space on your screen, I suggest you leave this window visible at all times.

Try every option in the application's Action and Player menus. When you are familiar with the basic commands, start a new game again using two players. You can control both players and simulate combats between the two armies.

HAVE FUN, AND GOOD HUNTING!

Playing by Internet

To play over the Internet, you need to connect to a [NetMetal Server](#). This is the obvious part! But for the server to recognize you, you need have an ID, which is called a login in the game. That's why you have to choose a login and a password before connecting to a server. This is also how the server knows in which games you are playing, so it is very important !

Once you are logged on to a NetMetal Server, you get told if you are Registered, Unregistered or a BetaTester player. This status is set according to the name you wrote in the Real Name field, so please don't enter garbage into those fields!!

Also see the [NetMetal Settings Screen Explained](#) section.

Finding Cash

Cities' Income

It's a well known fact that owning cities is the easiest way to get cash. :) Income is obtained according to the Tax Rate you set. Play with the Tax Rate in a City and notice how that city's income varies.

Natural Resources

The ore produced by a mine is worth \$1 a ton, wood and oil is worth \$2 a ton, and gold is worth \$3 a ton. Ore can be found in the flat open country, wood in the forest, gold in the snow-covered land, and oil is found in the desert. To sell the production, move a Truck into the mine (mill or field), load the truck and then move the Truck onto the nearest city.

See also [Woodmills, Oilfields, Iron and Gold](#)

Sell Units

You may disband useless or obsolete units for a few extra \$ with the S key while the unit is blinking.

Peace Treaty

Offering or accepting a Peace Treaty gets you money.

If a player with breaks the Peace Treaty, you obtain the money left as a guaranty.

See also [Peace Treaty](#).

Protecting your Base

It is of prime importance to defend your base adequately. So, as soon as possible, you should fortify the base by keeping units with strong defensive values, like Porcupines. See [Special Military Units](#). Be sure to always have one unit inside your base to defend it. If another player conquers your base, everything you own falls into his/her hands. Remember that a Commando unit can invade a deserted base without being seen. If you lose your base, you lose the game and are out of the game.

It is also good practice to protect the cities nearest your base since an enemy may otherwise invade it easily and transform it into a HQ. See [Transforming a City into a HQ](#)

Expanding your Empire

All the cities are inhabited when you arrive. To conquer a city, just enter in it with an infantry unit (Soldier, AlphaWarrior, Panther or Commando) and the city is yours. The city already has a number of citizens (between 1000 and 1300) who will pay taxes and buy your natural resources. Roads and Transport units are extremely effective in expanding your empire faster.

Roads

The speed of ground units is calculated according to its normal movement on a road. Ground units have more difficulty to move when they are off a road. The speed is reduced to one half when in the open grasslands, and to one third in forest, desert and snow. This is why traveling by road is better! It is always possible to lay out roads with a Bulldozer. When the Bulldozer is blinking, hit the R key to lay out a road section. You can make a road section equivalent to the length of a square for only \$2!

Unfortunately, it is not possible to lay out roads in the desert or on snow-covered land. But you can open a trail the same way you do for a road and for the same price. Your ground units will travel at half speed on those trails which is better than a third of the speed without a trail.

Attacks

Each unit in the game is in fact a group of 8 sub-units. When under attack, this number decreases in proportion to the inflicted damage. If the number reaches zero, the unit is killed and disappears. There are two ways to attack an opponents cities, resources or units, first you can simply move your unit on the opponent's unit, or you can use the ATTACK mode (Hit the A key while the unit is blinking). If you use the first method and you destroy the opponent's unit, your unit moves into the place of the destroyed unit. In all other cases, your unit keeps its position.

Experience

When a unit causes some damage to an opponent, the unit acquires experience worth one point (represented by a star). If this unit completely destroys the opponent, it acquires 2 experience points. Those points raise the skill of the unit and increase its following performances by 10% for each experience point. Conquering an opponent position also gives the units experience points.

Surrounding Effect

If the opponent's unit is surrounded, its efficiency is decreased. Its attack and defense power drop by 10% for each unit surrounding it. So prepare your attacks accordingly!

Attacks and Transports

Sometimes, transporting units are involved in battle, they are easy targets for the enemy. But what happens to the units they're carrying?

Units IN transport units (Transports, Cargo and Hercules units) can not defend themselves, they are IN the transports. So if the transporting unit is killed, so are the units within! It is a good idea to unload the units before ending your turn allowing them to defend themselves!

The only exception to this situation deals with Patriot units. They ALWAYS defend the transports and they always counter-attack!

Winning the Game

Basically, you win the game when you control the world you are playing in. That is, you win once you have taken or destroyed every rival empire. That game is then over, but any players may get in to see how it has been won. After a certain period of time the game is automatically deleted.

To take control of a rival empire, you have to invade the enemy's base (or one of the enemy's bases). Your enemy's cities, resources and units will then fall under your control.

You earn points in the Metal Knights Hall of Fame by "killing" another player and by winning the game.

Designing a Battlefield

The MapEditor is quite powerful and easy to use. However, it is not idiot-proof! It gives more freedom to the designer by letting him use temporary invalid configurations instead of guessing what the designer might want to do. Every designer will appreciate that, no doubt!

To activate the MapEditor, Start a New Game (Add in a player, Select a battlefield), and select Activate from the MapEditor menu. This feature is disabled while connected to a NetMetal Server or while a game is in progress.

To play with your battlefield on the Internet, send your .MAP file by e-mail to the Metal Knights Cartographer and I may add it to the others, if it is playable. See the Metal Knights Home Page on the Web for details.

For a more enjoyable game, please follow these simple rules :

- Most of the surface should be grass
- Don't use too much water, those regions are wasted!
- Don't put cities less than 4 squares from each other
- Don't try to use every ground type together
- If the MapEditor does not adjust the borders by itself, you have an invalid configuration :
 - Forest is always surrounded by Grass, Water, Mountains or Snow
 - Water is always surrounded by Grass or Forest
 - Snow is always surrounded by Forest
 - Mountains are always surrounded by Forest
 - Desert is always surrounded by Grass

Special Military Units

Some units have very particular characteristics...



Infantry

Soldier, AlphaWarrior, Panther and Commando units are each a part of the infantry. These are the only units that can conquer new or enemy cities. As soon as you own the town, all the taxes coming from it are directed into your treasury.



Bulldozer

The Bulldozer helps you to set up mines, sawmills and oil wells. Simply move it on the appropriate icon on the map to start exploitation. Bulldozers can also build Roads and drop Flags



Flag

A flag is a cheap way to get a military presence somewhere. It's just like a unit, it contributes to expand the territory under your control !



Truck

Trucks transport ore, wood or oil into a city in order to sell them. A truck usually has a load capacity of 50 tons.



Porcupine

These are very effective defensive units. You may spread them on the battlefield or stack them in your base, cities, mines, etc. If left on the ground, they explode and kill the enemy units that move onto them (good against all units, ground, navy, and air force). If left in a base or city, the enemy forces must attack them like any other units to continue.



Commando

The Commando acts as a spy, by entering a city or a base it can see the enemy's possessions. The Commando is always invisible even to enemy radar! If the town or the base does not have any units located inside it, the Commando conquers it, otherwise, it shows all the information about the town or the base and the units it contains.



Long Range Attack Units

Some tanks, airplanes and guns are equipped with long range ammunition. This is very useful since the enemy cannot counter-attack the unit! To attack from a distance, you must use the ATTACK mode. While the unit icon is flashing, hit the A key to engage into attack mode and select the target! If an enemy attacks your units from a distance, you cannot counter-attack! So protect your units!



Patriot

Patriots can defend a base or a town against long range attacks. If a PATRIOT is located inside a town (or a base) it takes care of all long distance attacks against this town. The PATRIOT is the only unit able to counter-attack long range attacks. It can also protect the Transport, Cargo and Hercules units against enemy attacks.



Shark

In different places of ocean on the map are wrecks of sunken ships. Those wrecks usually contain treasures, the only way to get them is by using a Shark. The Shark cannot be seen by an opponent who does not have a radar. It is important to note that wrecks sometimes contain blueprints!



Transports

There are 3 military units that are able to transport slower or immobile units. They are the Transport, the Cargo and the Hercules. They each have their respective function on the Ground,



on Water or in the Air. If one of the transport units is attacked, the pieces they contain undergo the same amount of damages as the carrier! A Transport can carry 3 units, the Cargo can carry 8, and the Hercules can carry 5. You can select a particular piece contained in the carrier by right-clicking on that carrier.



Nuclear



A nuclear bomb destroys EVERYTHING in a 3 square radius, regardless if the target is a City, Mine, Sawmill, Oil well, or a military unit...

Advanced Units

When the game starts, you may only produce primitive (however useful) units. You may gain more firepower by investing money in technology research. See the **Buy University** option in the [City Screen Explained](#) section.

Military Units

The whole game is based around military units. Use them to expand your empire, establish cities, take enemy positions, etc. Each unit has its own capabilities or properties as listed in the [Base Screen Explained](#) :

Abbreviation	Meaning	Description
Att	Attack power on the ground	Firepower against enemy units (Infantry, tanks and boats).
Air	Attack power in the air	Firepower against an enemy air units (planes).
Def	Defense power	Shield efficiency and defensive ability.
Rng	Attack Range	The unit can attack an enemy located at this distance (measured in number of squares). If this number is greater than one, the enemy cannot counter-attack.
Spd	Unit Speed	The number of squares a unit can move in one turn.
Cst	Unit Cost	How much it costs to produce this military unit.

You start with only a few different types of units. It is up to you to develop new ones by building universities! The most powerful unit is a Nuke. It destroys every unit within a 3 square radius!

See [Special Military Units](#) for a brief description of the units.

How to Get Military Units

The only way to get military units is to buy them. You may buy them from your base or from a city with a university or military factory. See [Base](#) and [City Screen Explained](#).

Moving Units and Enemy Zones

You may move a unit with greater ease using the keyboard but it is quite easy with the mouse. You must first activate a unit, when a unit is activated it blinks. Use the arrow keys or click a square next to the unit. The distance unit may travel in one turn is determined by its speed and the ground type the unit is moving on.

Ground Type

In general, the speed of a unit, is the number of moves a it can do on a road. Traveling onto grass or trails costs TWO moves while traveling into the forest, snow or desert costs THREE moves. That's why roads are quite useful. Of course, this does not apply to boats and aircraft!

Enemy Zones

Obviously, units cannot move into enemy territory freely, to reflect that, there are some movements you can not make, places you can not enter in enemy territory. As a rule, if your units lie in a square that is next to an enemy position, you can not move from that square to another square which is also next to an enemy position.

Goals of City Management

Okay, you have lots of cities under your control, now what? Of course, you have to pay attention to your citizens. You have to make sure that they have enough food, but you also want to increase their production. That is why you will want to make your cities grow and build improvements in them. Here is what a city looks like:



Grass



Forest



Snow



Desert

- Be careful, if the tax rate is too high for two consecutive days the citizens will revolt! Also, if the city drops to under 900 citizens, the city will become a ghost town and will no longer belong to you! Furthermore, it will cost you \$10 in administrative charges.
- It is important to feed the citizens of your cities. For each 1,000 citizens that are starving, it will cost you \$5 to feed them, and the population will drop at a 10% rate.
- If your city is fortified and under attack, you will be informed of the attack, the opponent, and the number of fortifications left, in a message on your next visit.

Feeding the Starving Population

With a growing population, you may have to buy more farms for your cities. Here are the four farms:



Grass



Forest



Snow



Desert

Below is the table showing the farms per population:

1000	people,	1	farm is necessary
3000	people,	2	farms are necessary
4000	people,	3	farms are necessary
6000	people,	4	farms are necessary
9000	people,	5	farms are necessary
13000	people,	6	farms are necessary
18000	people,	7	farms are necessary
24000	people,	8	farms are necessary

Metropolis

A Metropolis is a city with a population of more than 5,000 citizens.

The icon representing the city changes to:  when it becomes a Metropolis.

Having a metropolis gives you certain advantages, when you build a University, you get 2 technological discoveries for the price of one! The second technology discovered is in the same field as the first. It is very profitable to have at least one or two Metropolis in each of your games. With its large population, buying a bank becomes a sound investment. You may obtain a Metropolis by setting a city's tax rate to 0% for a few turns.

Transforming a City into a HQ

When an empire reaches a certain size, it may become difficult to buy a military unit and transport to a far off location. By building a military factory you can buy units directly in the city where the factory is located. This may also meet more offensive needs, a deadly strategy consist of reaching the inner region of the enemy's empire and then transforming an enemy city into an HQ. From there, you could buy units and start a new offensive, all from within an enemy empire!

Protecting your Cities

Usually, Cities don't really need to be protected. For some strategic positions however, protecting your cities is strongly suggested! You should protect cities near your opponents, around your base, or near other strategic positions. The fastest way to do this is to Fortify the City. But if that is not enough, you can position military units with strong defense strengths in your cities. Under attack, it is always the unit with the strongest defense who defends the city. Porcupine units are cheap and have a very good defensive value, so they one of the best choices. See Special Military Units.

Adjusting the Tax Rate

With a high tax rate, the income is high, but the growth rate of the population is low. On the other hand, if the tax rate is low, the growth rate of the population is high, which in the long run means an income increase. With a tax rate of 55%, the growth rate drops to 0%. It is important not to keep a high tax rate (above 60%) for too long because the population will rebel!

The suggested tax rate for most cities is between 25 and 50% while keeping some cities at lower rates for quick growths. Pay attention to the growth rate for given tax rates, for example a 50% tax gets you the same tax income as a 47% tax rate, but only half the growth rate! Notice that a tax rate of 0% gives you 20% in population growth!

You may change the tax rate of all your cities by using the Set Tax Rate Action or by pressing the T key.

NetMetal Settings

Here you fill in some information for the server to create an account for you. The process is quite simple, you fill the fields, click OK and that's it!

If you already have an account on the server, you may update any field you wish (except the login name of course) with this dialog box. In this case, you must connect to the server first. Then, while you are connected, uncheck the **Information Saved on Server** box. Then you can make your changes and click **Update**. Of course, the **Update** button only appears if you're logged on the server!

See also [Playing by Internet](#)

Login

This is your ID to enable the server to identify what games you have joined. It is also your code name in the game. The other players will know by this name, so choose it wisely. It may be your first name, nickname, etc. This name must be unique, two players MAY NOT have the same login. If someone already chose the same login as the one you wanted, it will not work. In fact, the server will not let you continue unless you know the password that the other player uses with that login.

Password

This is to make sure that someone else does not play in your games.

Real Name

Your real name (remember the one on your driver license?) If you register the game, this is the name the game will be registered to. This name must also be unique, the server will deny access if this name is already in use. If this happens, make sure you are not using 2 login names or a middle name.

Location

Saved but not used for now.

Email

Saved but not used for now.

Information Saved on Server

Once the server has saved the information, this is checked. You must uncheck this box to modify your settings.

NetMetal Games

This is where the games running on the NetMetal Server are listed. As always, you may sort the games by clicking the appropriate column header. See also [Playing the Game](#) to know how games are played!

Two lists are shown:

Left list - Games Found on Server

This is the listing of all active games. Some of them you may already have joined, some are waiting for new players, and others were started too long ago to be joined.

Name

The name of the game. Usually a short description of the desired game style.

Num Players

The minimum and maximum numbers of players allowed in the game.

Battlefield

The name of the battlefield being used.

Started

The number of days (or turns) elapsed since the game was started. You may join a game started some days (turns) ago. In that case, you would get a money bonus to catch up with the other players.

Type

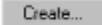
Game Type :

Classic - Turns finish at midnight (server time), so turns always last 24 hours.

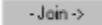
Double - Like Classic but turns finish after 12 hours. Yes, 2 turns a day!

Quick - Turns finish when all players have played the turn or the set time has elapsed. A turn may last as long as 24 hours but is usually much shorter. There can be as many turns in a day as players wish.

Buttons

 Start (Create) a new game. Of course, you are automatically playing in the game you create as the first player. [See Starting a New Game](#).

 Display additional information on the game like players' names.

 Use this button to join a game. You must join a game before able to play it. The game you selected will appear on the **Right List - Games you are in**

 This is a toggle button. When the button is up, only the games which you may join appear. Otherwise, all games are showed.

Right list - Games you are in

This is the listing of the games you have created and/or those you have joined.

Name

The name of the game.

Last Play

This shows the number of turns since you last played the game. If it is zero, you already

have played this turn and must wait until other players complete theirs (or until the turn time is up).

Surrendering!

This means that you are surrendering the current game! You are not dead, you are just telling the server you do not want to play that particular game anymore. At any time, until someone kills you, you may play in the game and remove the surrendering flag. It is not a good idea to surrender, as you'll lose points anyway. This feature is automatically enabled after a few days of inactivity and is mostly for people leaving unfinished games and never coming back.

Buttons

Details

Display additional information on the game like players' names.

Play

Use this button to play in a game. You can play games you have joined or created.

Server information

Quite self explanatory. Use the  button to see the settings the server uses to manage the games.

Starting a New Game

Create a new game on the server. There are *tooltips* on the controls here to help you.

Game Name

Type the name under which you wish to see your game appear.

Minimum Players

The number of players the game must reach until you can play in the game.

Maximum Players

The total number of players allowed in a game.

Battlefield

The name of the battlefield. Battlefields are stored as .MAP files on disk. You don't have to type the .MAP extension. Use the  button to browse and select a battlefield name.

Password

If you wish to create a private game or if you want to choose against who you will play use this feature. The characters "(Pwd!)" will be added to the end of the game name.

Game Type

This affects the duration of each turn. Classic games are suggested with a large number of players.

Classic - Turns finish at midnight (server time), so it always last 24 hours.

Double - Like Classic but turns finish after 12 hours. 2 turns a day!

Quick - Turn finish when all players have played their turn or time has elapsed. Worst case scenario a turn may last 24 hours but is usually much shorter. There can be as many turns in a day as players wish.

NetMetal Login

You are now connected with the game server!

Unregistered Player

Since I wanted everyone to play the game, you may freely use the game and the server like registered players. Actually, **you don't need to be registered to enjoy playing the game!** More than that, you can easily win the game over other unregistered players (and registered players if you know how to play!) All this so you can see the whole game before you decide to buy it. So it's really worth giving it a try!

Of course, registered players get a little plus... Otherwise who would give himself the trouble of filling a form, buy a stamp, etc. all this to get... nothing?! In fact, what happens is that the technologies you'll discover won't be saved on the server after a while. That's not so bad, it means that if you discover the Panther for example, this advanced unit will be available for you to buy for one turn only from your base (but still available from the city at any turn). In all cases, the advanced units you get always stay on the field, you just lose the ability to build them from your base. **Still, you may discover more (and all!) advanced units** by buying more universities at once or by buying a university in a Metropolis! This little incitement to register doesn't apply in local mode. Also, to maintain a kind of order, only registered players may create Metal Knights Alliances although anyone may join one.

Tip: Since you may steal technologies and can buy advanced units from cities with a university, an unregistered player has all it takes to win against registered players!

See also [Registering Metal Knights](#).

Registered Player

You now have full access to the server.

NetMetal Alliances

Alliances allow a new game type called *Allied* game where 2 or more Alliances fight against each other. An Alliance may count as much as 15 members and one leader. One player may be in only one Alliance at any one time but may leave and join back anytime any Alliance.

Allied players may not attack each other in an *Allied* game and don't have to respect each other's zones of control as they are no longer enemy zones.

By winning an *Allied* game, your Alliance gains points in the Alliances Hall of Fame. You get 1 point for each enemy player in the game. Surviving members of the winning also get that same number of points on their individual statistics. And as a bonus, the **Alliance Leader**, even if he didn't play that particular game, **gets 5 points!** This bonus will hopefully limit the very good players from being all in the same Alliance...

By losing an *Allied* game, your Alliance loses 1 point for each of your Ally in the game.

Mail

Send a mail to all members of a selected Alliance

Members

Show selected Alliance's members

Create...

Create your own Alliance and become its leader! See [Creating an Alliance](#).

Join...

Join an existing Alliance and become a member. See [Joining an Alliance](#).

Edit...

As the leader of your Alliance, you may change your Alliance settings including the name and password... See [Creating an Alliance](#).

Leave

Quit the Alliance you're in. Note that if the Leader leaves, then the first player to join in afterward will become the new Leader.

Creating an Alliance

Here you start and define how your Alliance will be called.

Password

To control who may joins your Alliance, select a password and share it with the players you want in your Alliance!

The following data are only shown on the Metal Knights Alliances Page on the Web (See the MK Home Page)

Home Page URL

If you have a Home Page for your Alliance... Please, the page must be on Metal Knights! The URL must begins with http://

Logo URL

If you have a Logo for your Alliance somewhere on the Web as a GIF or JPG file... Please, use a logo which is smaller than 5KB! The URL must begins with http://

Description

Enter a description for your Alliance...

Joining an Alliance

You may join any Alliance anytime as long as you know the Alliance's password!

Alliance Members

Here are listed all members of a given Alliance with their rank.

Flip Join

The Alliance leader may deny the right some members to join or create Allied game. This is mostly a friendly *Kick Out* option...

Base

It is very important to choose a good spot for the location of your base, because the whole game depends on it. Select a spot near cities, natural resources and lots of roads. The base is the starting point of all your military units. Hit the B key to establish your base where the cursor is pointing.

Recruit Unit

You can buy military units from 3 different fields... All the characteristics of the available game pieces are listed and explained in the [Military Units](#) section.

Buy a Radar

A radar is very useful when the game gets more advanced. It helps you to easily detect the units on the field. With a radar you can see the units hidden inside a city or a base. Some game pieces like the Shark and the Porcupine are undetectable on the field if you do not have radar! But remember that the Commando and the Stealth are not visible, even with radar capabilities. Double click on the World Map window to access the radar window.

City

Change City's Name

This makes it possible to personalize your empire. Give the city a name that will help you to locate it easily. It's quite possible that two cities share the same name, you may want to change one of the city's names if this happens.

Change The Tax Rate

You can change the city's tax rate with this option. See [Adjusting the Tax Rate](#).

Keep

When this button is down, the city's tax rate is left unaltered when using the Set Tax Rate action (the T key). This is very useful to keep a city's population below 1,000 or growing quickly while changing all other cities' tax at once.

Buy Farm

A farm produces the food necessary for the survival of the citizens. Feeding the citizens should be the first step after you conquer the city. See [Feeding the Starving Population](#)

Buy Bank

A bank produces additional income for the city. It will give you \$2 for every 1000 citizens. A bank is a good investment when the city reaches a certain level. However, a bank cannot produce income exceeding \$20.

Buy University

Universities will enable you to improve your military technology. You can choose between 3 different areas of research: *Ground*, *Navy* or *Air Force*. Better military units will give you an advantage over the more primitive ones. You will even obtain the prototype of the new weapon discovered the turn after you bought the university. It will also be possible to buy this unit directly from this town by selecting **Buy Unit**. This new button will replace the **Buy University** as soon as the technology is discovered. See also [Metropolis](#)

Buy Factory

When an empire reaches a certain size, it may become difficult to buy military units and transport them to their destinations. The military factory sells those units directly in the city where it is located. Once the factory is built it will be possible to buy units directly from this town by selecting **Buy Unit**. This new button will replace the **Buy Factory** after the factory is built, that is, one turn after you buy the factory. See also [Transforming a City into a HQ](#)

Fortify City

This option increases the defensive strength of a city by 50% for all the units inside the city. This is important when the city is under attack! Furthermore, if no units are in town to protect it, the city can defend itself with about the strength of an AlphaWarrior. You can repair damaged fortifications by clicking the same button when the city has already been fortified. Furthermore, if the city has been fortified, you will be advised of any attack on that city, with the identification of the opponent and the number of fortifications left, in a message on your next turn.

Select a Unit

In the middle of the City's Screen, you can see all the units located in the city. Just double-click on the desired unit to activate it. It is also possible to select a piece located in the city without entering the city, by right-clicking the picture of the town on the map.

Woodmills, Oilfields, Iron and Gold

This topic deals with the exploitation of the natural resources found in the game. The workers in the mines will extract the natural resources. Then these resources can be sold for a fair profit to the empire. The workers of a mine will produce 5 tons of ore in a day and 10 tons in a day if a factory is present. The resources can then be taken away for sale in your cities with a Truck units. There is enough storage in the mine itself so that you do not have to empty the mine every turn. This way you can let the natural resources accumulate before loading them onto Truck.

Load Truck

This fills the Truck with 50 tons of resources or less if there is less to pick up.

Unload Truck

This empties the Truck load into the mine for storage. This may be useful to be able to pick up the resources of two mines on the same turn.

Assign Truck

This assigns the Truck currently in the mine to permanently ferry the resources to the nearest city. By doing this you lose control of the Truck and all resource produced here will be cashed on the beginning of each turn!

Buy Factory

This doubles the production of your mine. The factory costs 5 times the price of the resource (i.e. \$25, \$50 or \$75)

(note: the features mentioned above are applicable to mines, wood mills, and oil fields)

Changing the Tax Rate

By using this option it possible to change the tax rate of all the cities simultaneously. This is a macro command, so that you do not have to go into each city and adjust the tax rate. If the **Keep Tax Rate** button is set in the individual City Screen, then that city's Tax Rate can not be changed until that option is turned off.

Sending a Message

A messenger is used to deliver messages to the other players. This option adds a loads fun to the game! However, please remember to remain polite in your messages! :-) The addressee will receive your message automatically at the beginning of his next visit. Once sent, it is impossible to stop the message from being delivered.

Peace Treaty

With this option you can obtain money by promoting peace between players' empires. The player you offer peace to will be informed on his next visit. He may first look at your situation in the game by clicking **Cancel**, then he must go to the **Peace Treaty** menu to accept or refuse your offer. If he accepts, he cashes in on the money offered by the UN and Peace Treaty now exists. On your next turn, you too will receive the same amount of money.

In order to attack a player with whom you made peace, you must break the Treaty. For either side to break a Peace Treaty you must to pay the UN twice the amount of money you received or even 3 times if your have twice the number of cities your opponent holds. If your empire is half the size of your opponent's it will only cost you the same amount as the one you received. Once the Treaty is broken the UN will help the defender by giving him the original amount of the Treaty on his next turn.

In case your opponent's empire is 3 times larger than yours, you may incite a rebellion against him. In this case, you are not required to pay back the UN!

Usually, it is a good idea to make peace with foreign empires, later, you can always pay to break the Treaty (to attack your unwanted partner). Because, early on in the game, you need a lot of money! With the money enlarge your empire, make it stronger, without losing units in battle. Then later, when you have a lot of cities (and cash), it should be easy to pay back the UN!

Starting a Game in Local Mode

Metal Knights is a multi-player game, so you must **add** some players in your game! You may **add** as many as 10 players and there must at least be one. Once all players have been added, click **Start**.

Select Battlefield

This is a list of recognized battlefields. Some contain many cities and natural resources, others have less of them hence more difficult to play.

Download (Net only)

Use this option to download the selected Map file to your machine.

Buying a University

By buying a university the researchers in the city will direct their efforts to produce a new military unit. You must select a field for them to concentrate their efforts in. The three fields are: **Ground, Navy or Air Force**. On the next turn, you will get the result of their efforts ready for use, and you will even be able to buy the same unit from this city. The new technology will also become available in your factories and base(s). Remember to protect your Universities since others may invade the city and get that technology for free!

Connect to a NetMetal Server

This is the menu where you select a NetMetal Server. It must include the name of the server and a semi-colon followed by the port number. The port number is usually 3333.

`blaise.info.polymtl.ca` is the only official NetMetal Server for now.

Hall of Fame

Here is a complete list of players from the most famous and respected to the rookies. By clicking on the appropriate column you may sort the data anyway you like. In the Hall of Fame (HOF) every player has a rank. Here is a the list in order:

Soldier, Corporal, Sergeant, Lieutenant, Captain, Major, Colonel, Admiral, General, Metal Knight

Players

Player's Rank and Code Name

Games

The number of games that player has joined.

Kills

The number of empires that player has conquered.

Died

The number of times that player has been eliminated.

Wins

The number of games that player has won.

Avg

The number of games won divided by the number of games the player has finished.
(games won / total games joined)

Ratio

The **Score** divided by the number of **Games**
(# of points / total games joined)

Score

The players score. In every game you gain points for invading other empires, at least 3 points plus a bonus (if applicable). When you kill a player with a higher score than yours, you get the bonus, it is computed as the opponent's score minus yours divided by 10. (opponent score - your score / 10) You lose 2 points if your empire gets invaded (if you lose the game). See Server Information in the [NetMetal Games](#).

Mail button

By selecting a player and clicking this button you can send the player mail he'll receive on his next login!

Email button

By selecting a player and clicking this button you can send the player email!

Statistics

Territory

Shows the number of squares occupied by each player in the game.

Number of Cities

Displays the number of cities every player currently holds.

Population

The total number of citizens in a player's empire.

Production

The amount, in cash, that is produce in each turn by a player.

Number of Units

The total number of military units every player has in his/her empire. This includes invisible units.

Units destroyed by player

The number of units (not groups of) each player has killed to date.

Units killed by others

The number of units (not groups of) each player has lost in battle to date.

Turn Income

This is where you will find the Tax Report from all your cities. It also displays the status of each city, the total number of citizens in your empire and the tax revenue for this turn.

You may sort the cities by clicking any column header.

City Name

Not much to add. Remember however that there may be more than one city with the same name.

Population

The number of citizens in the city. It may also be **Ghost**. This happens when the population drops below 900 citizens. A city may not exceed 30,000 citizens.

Tax Rate

The tax rate for the city. May also display **Too High** if the tax rate is kept above 60% for too long.

Food

The quantity of food in storage in the city. May also say **Starve** if the food quantity falls to zero and people are still hungry. In this case, the city decreases in size and it costs you \$5 for every 1,000 citizens to get fed.

Income

The tax revenue from this city for this turn.

Management Lab

Very similar to the [Cities' Income Screen](#) but far better. This is a great tool to use while managing your empire. It is important however to keep in mind that all of the values are not the actual values but the ESTIMATED values for the next turn. This window is able to display your cities, your natural resources or your units. By clicking on one, the main game window zooms in on it and the World/Radar window follows it too. By double-clicking on one, you activate the unit, zoom into the city or resource. You may resize the window as you like and the settings are saved for the next time you enter the game. You may toggle this window easily with the **V** key.

You can update the values in the management lab by clicking on any **Manage** circle in the top left-hand corner of the window.

The check boxes provided are a very handy way to filter your cities. A check means that the city improvement must be present for the city to be listed. No check means that the city improvement must NOT be present for the city to be listed. A grayed check means the presence of this improvement don't care.

New Battlefield

Name

The name you wish to give to the map. You may change it later by saving your battle field with a different file name.

Width and Height

The size of the battlefield in squares. You will NOT be able to change these values later!

Description

Brief description of the ground type, number of cities and natural resource found.

See also [Designing a Battlefield](#)

Game Options

Standard Font

You may customize the standard game font. The font is used for viewing messages and in some list boxes. The default is Arial, Regular, 11 point.

Transporting Units

You may customize the behavior of the following units: Transport, Cargo and Hercules. By default, the unit becomes active when a unit is loaded into it, and a unit in their hold becomes active when the transport unit stops.

On-line Tips

Displays some pop-up windows while playing the game with helpful tips so that you may learn the game faster and become better player.

NetMetal Server

The server is a simple program that runs on a foreign computer. The NetMetal Server in this case is a daemon that runs on a SUN workstation with the UNIX operating system. This program manages the games for all the players, and communicates with your computer to know the moves you are making and then saves them.

Make your Empire Grow

When the war starts, the winner is usually the one with the largest empire. Knowing this, before declaring war on an opponent, make sure you have a bigger empire than him. To achieve this, continually buy Panthers and Transports. Send them in every direction to establish as many cities as possible **and** make them grow by setting low tax rates.

Social Security

Have you noticed a city needs 1 ton of food for every 1,000 citizens? What happens if the city has less than 1,000 citizens? Yes, the city doesn't need any farms at all. Raise the tax rate of some cities to make them go under 1,000 before they run out of food. Then set the tax rate to a 0% growth rate, that's around a 55% tax rate.

The Value of Money in Time

The value of money varies a lot as time progresses. A good idea is to buy large investments as late as possible. This includes Factories, Radar, and expensive Units, etc. This also means that you should only buy improvements (like farms or fortifications when needed). Use your money wisely by buying units to enlarge your empire or by lowering the tax rate.

Hide your Units

Why let the enemy know your strength or even what you are planning? Hide your units! When you are preparing an attack, use the surprise effect to your benefit, stack some units in a nearby city for a few turns so that your opponent can not see them and then strike!

Attack is the Best Defense

Attacking is the best way to defend your empire. When someone starts to steal your cities, it is easier and much more efficient to steal his rather than trying to defend those that you have left! The result is that you gain about the same number of cities as you lost with minimum casualties!

Use Cheap Units Too

In the battle, bring some weak or useless units to the front along with your more powerful units. They contribute to the Surrounding Effect even if they stay in a transport! If the enemy starts attacking them, they will absorb some of the damage that your more powerful units would otherwise get!

