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Multiparameter Numerical Medium for Seismic Modeling, Planning, Imaging & Interpretation QC Worldwide

Licensing of Tesseral Products

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1. Licensing types

Using of the package requires obtaining license from the Tesseral Technologies Inc.

Single-user License

A *local alpha-digital key* is unique for particular computer. Licensing with the alpha-digital key doesn't allow transmission of this key between computers. This may be most suitable choice for trial license of the package, a public standalone PC or permanent user-independent workplaces like a computer class at training facility.

A *local hardware key (HASP)* provides licensing when plugged into a USB port of a computer. User can install the same *Tesseral* product at other workstations and use the same key. So this type of licensing is the most suitable for occasional using of *Tesseral* package on multiple work-places, e.g. both at field and in the office.

Network License

A network license is unique for the client's network. The license key is installed on one of network PC's usually called as a *Server*. It may look as a best choice for bigger or scattered companies. Due to increasingly toughening policies in Windows system administration it may require some additional network administrating efforts (eliminating possible interference with particular network security features and local network Firewall settings) to support such configuration, but as result multiple users can utilize common license directly from multiple network PCs. The program must be initially installed on each of computers running *Tesseral*.

• A *network alpha-digital key* license is supported using Internal or Sentinel License Server.

- A *network hardware (HASP) key* provides licensing when plugged into a USB port of any computer in the local network or VPN (Virtual Personal Network) to which the user's computer is connected.
 - ✓ This type of licensing inherits as upgrade Tesseral-2D CS (Client-Server) licenses. Such change is caused by the necessity of the product development basing on the next version of the Microsoft compiler and using of SQL server (Tesseral-Pro only).

Mixed License

Any combination of above mentioned key types may be used by client for licensing of *Tesseral* products. For example, 3 workplaces on a network HASP key, 2 local USB HASP keys and 2 alphadigital keys can be purchased and used together as a license for 3+2+2=6 workplaces. *For each of key types can be specified particular edition of the Tesseral product* along with additional processors used for speeding up massive modeling and seismic imaging computations.

Licensing for evaluation period usually is done with local alpha-digital key.

2. Licensing with Alpha-digital Key

The first time launched program is initially producing *the Registration dialog*:

Nm.	Register Tesseral 2D	
THE REAL	- Alphadigital key	
and the	Dutgoing Code:	V7U3V5BHXPXXX4AE
TESS	Incoming Key:	Please, transmit the above code to your Tesseral distributor, recieve product key and enter below:
© Copyrigh		Please, visit http://www.tesseral-geo.com for information of how to obtain trial evaluation key. Register Cancel
	HASP key	Network HASP key Network Address: Server

There must be executed exchange of the outgoing (produced in the *Registration* dialog) code and ingoing (supplied by the company *Customer Service*) key. **Outgoing code** from computer with installed package may be sent by to the company *Customer Service* e-mail support@tetrale.com.

Licensing with Local Alpha-digital Key

- 1. After receiving incoming alpha-digital key launch the program and enter into "Incoming Key" control the key;
- 2. Press button "Register";
- 3. Read the appeared "*Registration Information*" dialog and if it is OK press the button "OK", if not copy this dialog and send it to Customer Service with your information.

Licensing with Network Alpha-digital Key

Licensing with Sentinel License Server is described in <u>1 2 Licensing with Sentinel License Server -</u> <u>Tesseral-.pdf</u>

Licensing with alpha-digital key for Tesseral LINUX cluster computational engines is described in <u>1_4_ReadMe for Tesseral-Linux Cluster Computation Engine.pdf</u>.

3. Licensing with Hardware Key (HASP)

allows user run the Tesseral package by using supplied by *Tesseral Technologies Inc.* electronic USB device (or called as HASP key – "Hardware Against Software Piracy") as licensing key when this device is plugged into a computer USB port.

HASP key is initially coded for latest version of the particular Tesseral product and configuration and may not work for later versions released as the package develops as well as more extended configurations. Upon user request and payment for upgrade, this key may be coded for upgraded version and product configuration via e-mail (user will receive necessary instructions in this case).

HASP key may be coded for unlimited period (*permanent*) or limited period (*trial* or *leasing* period), after this period the package will not work until user get from Tesseral Technologies Inc. new permanent HASP key or code it via e-mail from Tesseral Technologies Inc.

Particular HASP key is not tied with particular Tesseral installation CD.

User must **keep the HASP key and do not lose it,** because company is not providing replacement HASP key due to impossibility to control in this case number of really used package licenses. If HASP key is damaged user must inform by e-mail company's Customer Service and then send it via mail to provided address to get replacement key for its market price (about US\$ 50) + shipping and handling.

Supplied with installation of the Tesseral products HASP key (Guardant) drivers are Microsoft-certified and therefore will be no warning messages when you insert the key after new drivers are installed.

Green indicator on the USB device should be lightening if the installation of drivers is done successfully.

IMPORTANT!

The new (2008) HASP drivers are strictly connected to the Windows (not computer!) bit number. At installation the program recognizes type of the Windows and installs corresponding drivers. **Insert USB key only when the installation is finished. You can't mix 32- and 64-bit drivers** if you will have to install them manually.

Before installing the package it is recommended to read **ReadMe for Installation of Tesseral Products.pdf**(on the installation CD or in the download package) containing general information about the package and relating system and equipment requirements.

Usually drivers for HASP key supplied with the package are installed automatically in the end of the package installation. If you have problem with this hardware installation, or want to uninstall drivers manually download from the company's website <u>www.tesseral-geo.com</u> page **/Downloads** the following drivers and proceed with dialogs:

- ✓ Software for Hardware Keys (HASP)
 - 1. Drivers:
 - a. Guardant HASP drivers for Windows 2000/XP/Vista (32 bit);

b. Guardant HASP drivers for Windows XP/Vista (64 bit);

Then, after finishing this installation of drivers and inserting HASP key again follow instructions of automatically appearing *"Install New Hardware"* dialog.

- 2. If you have to update your HASP keys download and install <u>Utility for remote update</u> of HASP Keys;
- 3. If you are using network HASP key download and install <u>Guardant Service for</u> <u>Network HASP Keys</u>.

Licensing with Local USB Key

allows user to install the package on different computers and run the package on each of computers by using supplied by *Tesseral Technologies Inc.* electronic USB device (or called as HASP key – "Hardware Against Software Piracy") as licensing key. Without this device plugged into a computer USB port this variant of the package licensing does not work.

The first time launched program is initially producing *the Registration dialog*:

TESS Full-w/	Register Tesseral 2D Alphadigital key	V7U3V5BHXPXX4AE Please, transmit the above code to your Tesseral distributor, recieve product key and enter below. Please, visit http://www.tesseral-geo.com for information of how to obtain trial evaluation key. Berinter Cancel
	HASP key	Network HASP key Network Address: Server Connect

- 1. Insert your USB key and then press "Insert Key".
- Program must start. If it is still producing dialog "Need USB key", copy this dialog and send to Customer Service with your information.

Licensing with Network USB Key

System Requirements:

- Server
 - Windows XP/Vista or Windows 7 Server
 - Network Card
 - USB 2.0 Port
- Client
 - Windows XP/Vista/7
 - Network Card

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- Tesseral 2D or/and Tesseral Pro installed

Use Network Service for Tesseral Network USB keys (see Software for Hardware Keys 3) :

1. Run Guardant Service for Network HASP Keys:



2. Click Next >



3. Select destination directory and press Next >



4. Insert your USB key and then press Next >

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a. You may run "Network key monitor" to check is your key is working properly:

	E	Set Program Access and Defaults						
	*	Windows Update						
ø		Programs	•		Accessories	•		
ssion		Documents	•	-	Guardant-Net Services Startup	•	2	Network key monitor Network key service
rofe		Settings	•	(C) (C)	Internet Explorer Outlook Express	-	15	Uninstall
8		Search	*					
WS 2	Ø	Help						
1 Sector		Run						
S		Shut Down						
	Start	🛛 🙆 🈂 🗍 🔂 Guardant Ni	et Se	ervic	es			

b. ... and check: The "Host Name" :



5. To use Remote USB key enter the "Host Name" in Tesseral registration dialog and press "Connect" :



4. Troubleshooting

- ✓ You (your company IT engineer) must select the most appropriate method of licensing.
- ✓ You don't need to use different licensing methods all together.

Network License

- ✓ You don't need to connect each workplace to a specific license server host. Different users can share common license server.
- ✓ It is commonly inconvenient to divide licenses among multiple servers as each user can select just a single license server host. And it is possible that at the same time users of one server are waiting in a queue when another one is free.
- ✓ Also location of different license server software on a single PC is not supported.
- ✓ Both the Guardant Net II USB key and Sentinel alpha-digital key provide multiple floating licenses. In both cases you install license server software on a PC. In both cases you install Tesseral products on multiple user PCs. In both cases when you run the Tesseral program on a user workseat first time, you see the "Registration" dilalog. In both cases you have to specify the license server IP or hostname in correspondent editbox (located in the right bottom corner of the dialog). The only difference is the license carrier: it is either a server-independent USB key (in the hardware case of Guardant) or the server locked software itself (in the alpha-digital case of Sentinel).
- ✓ Do you want to move the license server on another PC? In the case of network USB licensing just install <u>http://www.tesseral-geo.com/download/guardnetnetservices.zip</u> on the new server and insert there the USB key.

✓ Read only if you encounter problems

- 1. Technical information for system administrators
- Guardant Network Service use following TCP/IP ports (both ingoing and outgoing):

- 3182/TCP
- 3183/UDP
- 3184/UDP
- Configuration files for advanced settings
 - For server: NNKSRV32.INI
 - (in Guardant Net Services directory)
 - For client: GNCLIENT.INI
 - (In Tesseral Directory)
- 2. Setting up the Firewall for system administrators
 - a. Open Start->Settings->Control Panel then Windows Firewall :



b. Setting up the Firewall; Click "Advanced" tab then "Settings" button :

	windows The wan
eral Exceptions Advanced	General Exceptions Advanced
Your PC is not protected: turn on Windows Firewall	Network Connection Settings Windows Firewall is enabled for the <u>connections</u> selected below. To add exceptions for an individual connection, select it, and then click Settings:
m gaining access to your computer through the internet or a network.	✓ Local Area Connection 2 Settings
	✓ SE-ИК порт-МТS
On (recommended)	☑ SE-кабель-MTS
This setting blocks all outside sources from connecting to this computer, with the exception of those selected on the Exceptions tab.	Wireless Network Connection
	Security Logging
Don't allow exceptions	You can create a log file for troubleshooting purposes. <u>Settings</u>
Select this when you connect to public networks in less secure locations, such as airports. You will not be notified when Windows Firewall blocks programs. Selections on the Exceptions tab will be ignored.	ICMP With Internet Control Message Protocol (ICMP), the computers on a network can share error and status information.
Avoid using this setting. Turning off Windows Firewall may make this	
comparer more valificiable to virages and intradicis.	Default Settings
	To restore all Windows Firewall settings to a default state. <u>Restore Defaults</u> click Restore Defaults.
hat else should I know about Windows Firewall?	

c. Click "Add", then enter connection data for "3182" port, then click "OK" :



d. Repeat for "3183" and "3184" ports:

	Service Settings	<u> Y ×</u>
duanced Cettings 2	Description of service:	
	Tesseral Network Key 2	Note:
Services ICMP	Name or IP address (for example 192.168.0.12) of the computer hosting this service on your network:	3182 is TCP,
Select the services running on your network that Internet users can access.	192.168.0.1	3183, 3184 are UDP!
Services	External Port number for this service:	
FTP Server	3183 C <u>I</u> CP ⊙ <u>U</u>	DP
Internet Mail Access Protocol Version 3 (IMAP3)	Internal Port number for this service:	
Internet Mail Access Protocol Version 4 (IMAP4)	1	
Internet Mail Server (SMTP)	OK Car	ncel
Post-Office Protocol Version 3 (POP3)		
Remote Desktop	Service Settings	? ×
Secure Web Server (HTTPS)	Description of service:	
Telnet Server	Tesseral Network Key 2	
Web Server (HTTP)	Name or IP address (for example 192.168.0.12) of the computer hosting this service on your network:	
	192.168.0.1	
Add Edit Delete	External Port number for this service: 3184 C ICP • Internal Port number for this service: 3184 OK	UDP Cancel

3. Questions and Answers:

a. Q: Network key monitor shows "blank" window

🜉 Guardant Net Monitor	
Servers View Help	
💐 🖻 🛛 ?	
Found servers:	

- A: Please, try following:
 - Check if green indicator in the USB key is lighten. If not, please, download and install latest drivers by following link:
 - Try to reboot your server
 - Check your firewall (see Setting Up Firewall on Server section

Troubleshooting problem 2

b. Q: Tesseral 2D/Pro does not "see" the network key

transmit the above code to your Tesseral
×
Network server not found! om for
OK Cancel
Network HASP key

A: Please, try following:

- Check your firewall (see Setting Up Firewall on Server section)
- Check the configuration in *gnlient.ini* file in Tesseral program directory