PRS ✳ Technologies, Inc.

Elite Enterprise Migration Preparation - Instructions to the client

Item Num	Description	Attention
1	**Add a domain user account for use by Elite services.** We suggest **"eliteadm"** (one word, lower case) This user account must be set up with no policies, desktop restrictions or login scripts. This user only needs access to the Elite servers and must be added to the local administrators group on those Elite servers. Note: if you don't have a domain, this step can be skipped.	IT
2	**Decide where you want to put the *eis.ini* file**, which will be used by all workstations running the Elite Enterprise client and must be writable by all. We recommend a share on an existing network file server and it is usually referenced by a UNC name. This is usually NOT an Elite server. **Also**, **decide where to put the network Elite Enterprise Client install directory**. This may be the same directory as the *eis.ini* file directory, but it must be accessed via a mapped drive.	IT
3	**Decide on what IP addresses to use for the new servers.** These must be static IP addresses. DNS entries should be made for name resolution.	IT
4	**Decide on the new server(s) names.** Keep it short, lower case, all one word, and no punctuation. i.e. eliteapp01, elitedb1, elitetest1	IT
5	Please provide the IP address of a **printer** close to where the installer will be working.	IT
6	**Client must run a set of balancing reports** to balance the test migration **BEFORE the on-site day**. See a separate spreadsheet provided by the Elite Project Manager for the list of reports that needs to be run. The process goes something like this: • Stop Processing on Current System – all users must be off the system • Close batches and audit finalize • Run the balancing reports and specified table counts. • Run the dbexport • Users can get back on the system. It is **crucial** that these reports get run and they **must be run with the same data that is created by the dbexport**. There can be no changes to the database between when the reports are run and the dbexport.	Acct Dept
7	**Dbexport** (if currently on Informix) **Make sure the Informix dbexport is done BEFORE the first on-site day**, usually the night before. Get assistance with this if needed. There is often a problem with not enough disk space on the old server to hold the dbexport. Let us know if this is a problem. We have ways of dealing with this. Do not presume you have enough space. The dbexport size is usually 30%-60% of the existing database size. **There is also a problem if the export of any one table exceeds 2gb**. We have seen this with *glpost* and *bimage* (images) tables. You should do a test dbexport a few weeks prior to the real one to see if you will have any problems. **Instructions for running Informix dbexport on Unix:** (for NT/Informix - see below)	IT

- Get to a Unix shell prompt. Login as "informix".
- Make sure you have exclusive use of the database.
    - Bring the engine down and up to help accomplish this (bounce the engine)
        - onmode -ky
        - oninit
    - Stop any jobs that would run via the cron
        - Login as whoever is running the cron job (usually informix and/or root)
        - crontab -l > cron.save
        - crontab < /dev/null
- Change to the directory that has enough disk space for the export
    - cd [my exportdir]
- Start the dbexport.
    - nohup time dbexport -q -ss son_db &
- Monitor the dbexport
    - tail -f dbexport.out
    - A successful dbexport.out file contains the phrase "dbexport completed" at the end.
- Restore the cron
    - Login as whoever was running the cron job (usually informix and/or root)
    - crontab < cron.save
    - crontab -l   (To see the restored cron)

If running **NT/Informix**, use the same procedure with the following changes:
- Stop any jobs that would run via the cron
    - cd /elite/custom
    - at > at.out   (to save a snapshot of your exist cron)
    - at /delete /yes
- Start the dbexport
    - cd [my exportdir]
    - time dbexport -q -ss son_db
- Restore the cron
    - cd /elite/custom
    - crontab.root.ksh
    - at   (to see the restored cron)
    - cat at.out   (to compare to your previous cron)

8	**Make sure you have all the necessary software.** • CD's for Windows/2003 server (or Windows/2000 server) and SQLServer (or Informix IDS), plus registration keys for both. • Elite Enterprise Install CD • Visual C++ .NET 2003 • Optional: FRX, IQ/Eureka, Minisoft, ARCS, Whitehill.	IT
9	**Hardware Configuration Instructions for all Elite servers:** See a separate spreadsheet for Elite recommended configuration. The drives should be partitioned as: • Drives must be configured as Raid 0+1. o Note: if Raid 0+1 is not available on your Raid controller, you can use Raid 1+0 or Raid 10. • 12 gb drive C: On large memory systems, drive C: may need to be larger to hold a large paging file. • All remaining disk space on drive D: (minimum of 12 gb on secondary app servers). • If there is a SAN - see additional guidelines below	IT
10	**Software Installation Instructions** • Install Windows 2003 server (current SP) or 2003 Advanced server (or Windows 2000 server). (**See section 29 below**) • Install IIS, but ONLY the FTP component. (Note: WebView servers must have all of IIS installed). • For Windows 2003, do NOT install Terminal Services. To enable Remote Access, go to Control Panel -> System -> Remote and check "Enable Remote Desktop." This will enable the Remote Administration mode for Terminal Services. • For Windows 2000, install Terminal Services in Remote Admin mode w/ NO Licensing Service. • If any default (fax) printers get added, delete them. • Do NOT install C++. • Do NOT install SQL Server • **Please do NOT install ANY other software on these servers**. Anti-virus software is OK.	IT
11	**Raid 0+1 vs. Raid-5:** There is a big performance difference between raid 0+1 vs. raid 5. As you may know, raid-5 gives you useable capacity of about 4 disks in a 5 disk system Raid 5 uses remaining capacity to store error correction codes (ECCs), which allow it to reconstruct missing data should one drive fail. This takes processing horsepower and many more reads and writes, however. Since raid 0+1 has no ECCs (and therefore takes up 50% of your disk to hold the mirrored copy), it works a lot faster.	IT

12	**SAN Issues** - The San drives available to Elite should ALL be configured as one large drive I: (that's drive "eye"). - The drives on the SAN need to be configured as raid 0+1 (not raid-5) - You are still supposed to meet Elite's guidelines regarding the number of spindles used for Elite. - All specified drive spindles are dedicated to Elite. No other applications should use these drives. - Note: The above 2 guidelines can be an issue because it usually results in a large amount of unusable disk space. We are aware of this and we still prefer to do it this way for performance reasons. - There should be Gigabit connections between the SAN and the Elite servers. - At least one SAN "pipe" is dedicated to Elite. - Note: the tempdb is usually placed on local (DAS) 0+1 drives on drive D: - Note: a SAN is almost always slower then DAS (direct attached storage).	IT
13	**There must be gigabit connections between the Elite servers** (if there are multiple Elite servers). They should NOT be going through a hub. (A switch is OK)	IT
14	If there is not a modem connected to each server, **there must be a way to RAS in or VPN** and connect to each Elite server.	IT
15	If migrating to an Informix system, you will need to decide on the name of the new **INFORMIXSERVER**. We recommend using the same name as the old system, as this will require fewer client application modifications.	IT
16	This is only done if currently on Informix and Unix. Please run these "oncheck" commands ahead of time, as the "cI" and "cD" may take a long time. Do it on a weekend. Many systems already run these on a regular basis. If so, you can skip this. Note: these don't seem to work correctly on NT/Informix. oncheck –q –n –cr > check.cr 2>&1 oncheck –q –n –cc > check.cc 2>&1 oncheck –q –n –ce > check.ce 2>&1 oncheck –q –n –cI son_db > check.cI 2>&1 oncheck –q –n –cD son_db > check.cD 2>&1	IT
17	Please make sure you let us know if you are using currently using **Elite imaging**.	Acct Dept
18	Decide whether you are OK with **NOT** moving all the **old reports** (normally viewed in Report Manager) to the new server. The default is to NOT move the old reports over to the new server.	Acct Dept
19	If you save **copies of the bills** in ascii files when creating bills (in elite/work/bills?), decide whether you want to move all the old bills to the new server. If you want to keep them, where are they on the old server and where do you want them on the new server?	Acct Dept
20	At least one **PC/Workstation will need to be available** to load Elite Enterprise on and test the system. **You cannot run multiple versions of Elite Enterprise on the same workstation**. Running the older Elite-for-Windows (2.5D or 2.8) and Enterprise on the same workstation at the same time is not supported by Elite, but it seems to work fine.	All

21	Have you made arrangements to get your **custom reports** and other custom programs moved over and recompiled? Let us know if you would like assistance with this.	Acct Dept
22	If **SQL Server**, do you **license** "per seat" or "per processor", and how many (seats or processors)?	IT
23	Are you supposed to have the Fulcrum search server installed? (used in conflicts subsystem)	Acct Dept
24	What is the IP address of an outgoing SMTP server that can be accessed by the Elite database server?	IT
25	If migrating from Informix to SQL Server, consider whether you want to use **"trusted" logins.** This means that users that have logged into the "network" do not need to log in again to use Elite. In addition, you can avoid having to maintain two separate databases of users, since you already must keep a list of users and passwords to log into the "network". Trusted logins make it so you do NOT need to keep a separate list of users (and passwords) in SQL Server. Trusted logins can only be used if your users log into a Windows domain when logging into the network. Novell users and users with Informix databases cannot use Trusted logins. One issue with Trusted logins is that the "network" login ID and the user name within Elite security should be the same. If this is not true, Elite has provided a solution to this problem, but you must put the "network" login ID into the *usmaster.ufullname* column in the Elite database for every Elite user. To assist with this, create a "map" of Elite users ID's to network login ID's in an Excel spreadsheet (using proper case). Note: if you do this, and you are using **WebView**, you must be sure that the user name used to update *usmaster.ufullname* is the same case as in active directory. Even though Windows login is not case sensitive, it does seem to matter with Webview.	All
26	If you are not using trusted logins, we can add the users to SQL Server using a plugged password, or if you create a "map" of users and passwords in a file or an Excel spreadsheet, we can use that password when creating the user in the SQL Server database.	All
27	Also, if migrating from Informix to SQL Server, consider whether you would like to convert to a **case-insensitive database**. Although this is a nice feature and possible, it is usually a big (i.e. expensive) job to make this switch. Contact your Elite project manager for more information on this.	All
28	Contrary to popular belief, we actually do **not** perform much work in the computer room, as it is usually way too cold and noisy for extended work. We do pop in once in a while to change a CD. A quiet little out of the way place with **power and a tcp/ip port** to plug our laptop into will do just fine. We do not need to use one of your workstations. Default dress code is business casual. Please let us know if this is not appropriate.	IT

29	**SQL Server Enterprise and Windows 2000 Advanced Server or Windows Server 2003 Enterprise Edition.**	IT
	Windows 2000 standard edition will only address 4 processors (logical or physical). It does not understand the concept of hyper-threading, so the operating system will only effectively use and is limited to 4 physical processors. If there are 4 physical but hyperthreaded processors in the system (8 logical processors), Windows 2000 will only use the first pipeline on each of the 4 physical processor.	
	Windows 2003, on the other hand, understands hyper-threading completely. It recognizes the difference in physical and logical processors. Windows 2003 licensing will only refer to the physical processor count, allowing a machine with 4 physical hyperthreaded processors (8 logical processors) to be supported with 2003 Server Standard Edition. See: (http://www.directionsonmicrosoft.com/sample/DOMIS/update/2003/08aug/0803piiws2.htm)	
	SQL Server Standard Edition will only access up to 2 gb of memory. So if your database server exceeds those thresholds, you would need to install the Advanced or Enterprise to fully utilize your server. Apparently, you can install SQL Server Enterprise on Windows standard edition without a problem, if that is desired.	
30	**Are you going to backup the database to tape or disk ?**	IT
	Many servers these days are configured without tape drives. This is possible because you can backup the database and/or transaction logs to a disk file and then backup those files the same way all other Windows files get backed up, usually with a central shared tape backup utility like *ArcServe* or *BackupExec*. These backup utilities require special "*agents*" to backup the database directly, but don't require anything special to back up a regular 'file" created by the database engine (which is a backup of the database or transaction logs). If done this way, then obviously how quickly the backup file is copied off the database server is crucial, since you would not really be backed up against a disaster until the backup file is copied off the server to another location or tape. So we need to know if we should create your database backups to tape or disk.	