

SmartPlant[®]
Instrumentation

SPI Backup via Remote Terminal

FLUOR

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Implementation Team

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FLUOR[®]

INTERGRAPH

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SPI Back Up via Remote Terminal

- ◆ Data Backup 101 – Why do we backup data?
 - Computer systems can fail (hardware, power, com links, etc.)
 - Users make mistakes or inadvertently **annihilate** data...OMG!!
 - Clients want watcoms for import, statusing or progress payments.
- ◆ SPI world vs. the IT world
 - Most companies have an IT network system policy that requires scheduled data backup with offsite storage for catastrophic failures, legal requirements, information security and because “it makes sense”. This backup would occur at the server level (Oracle, SQL Server, etc.)
 - The SPI Administrator may have similar concerns as the IT department but specific to SPI and to a particular project. Therefore, we use the backup functions which reside in the SPI Admin Module. A backup can also be used to “reset” a DB when a user has corrupted or over-written valuable data in SPI.
 - Remember there is no “UNDO” command in SPI (not yet anyway).



SPI Backup via Remote Terminal

- ◆ SPI offers 3 backup models OOTB (see SmartPlant Instrumentation Administration User's Guide – Section 4):
 - Backup a Domain – Backup an existing domain (one at a time) on the Oracle or SQL server and then backup to the repository (a stand alone file) called Intools_backup.db which is a Sybase Adaptive Server Anywhere DB. *To open the DB **stand alone** you need a full version of SASA software and you need to rebuild Stored Procedures & Triggers.*
 - Backup a Domain form the Command Line – Does not utilize the SPI Admin module. Works via batch file from a “DOS like” command prompt. **See SPI Admin User's guide for unique requirements and features.**
 - Backup a Domain in Thin Client Mode (Citrix) - Does not utilize the SPI Admin module. Works via batch file from a “DOS like” command prompt (on the Citrix server). Can require a copy of the Intools.ini file on the host server. *This method can be slow based on the connection.* **See SPI Admin User's guide for unique requirements and features.**
 - **We will look at the first method - but using a Remote PC Terminal.**



SPI Backup via Remote Terminal

- ◆ Important basic backup criteria to be aware of for SPI:
 - Make several copies of the OOTB Intools_Backup.db file. Backups are a “one shot” deal. You cannot overwrite a file.
 - Backups are SPI version AND Service Pack specific.
 - The domain backup name, the Domain schema name and the password are all “Intools_backup.” This cannot be changed.
 - In the target DB, the Domain TYPE is the same as the Source DB.
 - Trim Audit Trails before you backup the DB to backup Audit Trail data.
 - SPI creates an error log file (InitLog.txt) in the SPI home folder.
 - You cannot backup a domain in Window Vista/Windows 7 if the User Account control is set to “ON”. Temporarily set the control to “OFF” to do the backup.



SPI Backup via Remote Terminal

Remote Desktop Connection

Remote Desktop Connection (formerly Microsoft Terminal Services Client) is a technology that allows you to sit at a computer (sometimes called the client computer) and connect to a [remote computer](#) (sometimes called the host computer) in a different location. This technology come installed as a component of MS Windows and is located under the Start button > All Programs > Accessories > Remote Desktop Connection. See Microsoft Helps for more information and/or **see this excellent video link** <http://windows.microsoft.com/en-us/windows7/help/videos/remote-desktop-connection#tab=networking>

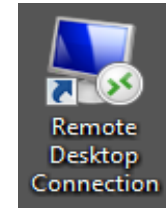
Other remote connectivity methods are available.



SPI Backup via Remote Terminal

◆ Basic requirements for Remote Desktop connectivity:

- The remote (host) machine must be enabled (configured for remote access).
- The (client) Windows user's profile (RAS) must be in the Admin Group on the host machine (see graphic next slide).
- The remote machine cannot go to "sleep" and must remain on at all times for client access - or the user cannot login.
- The SPI Admin module must be installed on the host machine.
- You need to know the "name" of the host machine.





SPI Backup via Remote Terminal

The screenshot shows the Windows Control Panel 'User Accounts' window. The 'Advanced' tab is selected, showing options for password management and advanced user management. Overlaid on this is the 'Local Users and Groups' console window (iusmgr), which displays a list of system groups. The 'Administrators' group is selected, and its properties dialog is open. In the 'Members' list of the 'Administrators Properties' dialog, the user 'FDNET\for32482' is highlighted, indicating it has been added to the Administrators group.

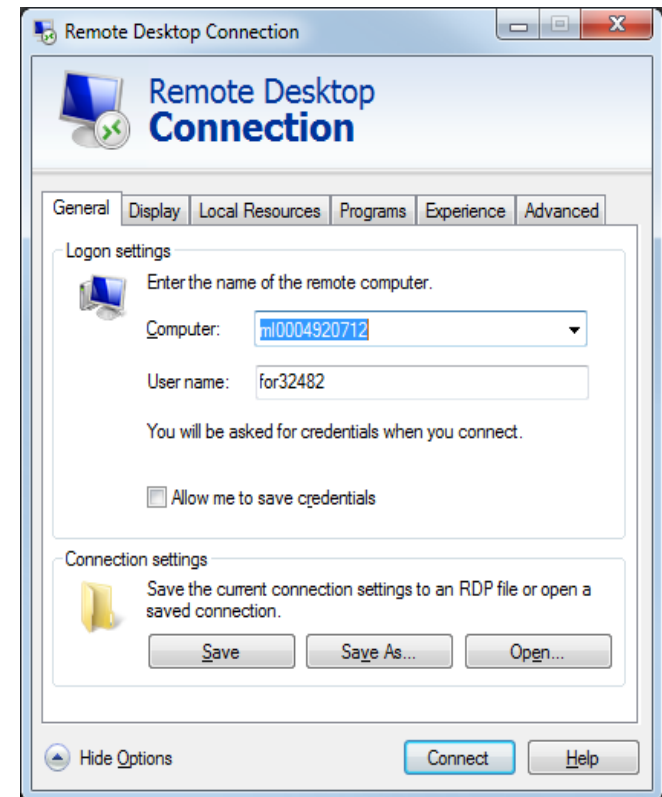
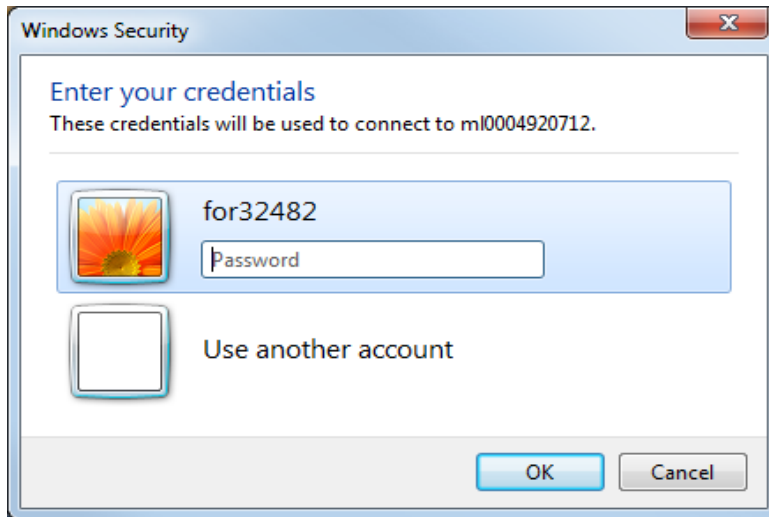
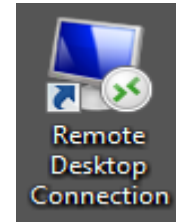
Name	Description
Administrators	
Backup Operators	Backup Operators can override se...
Cryptographic Operat...	
Distributed COM Users	
Event Log Readers	
Guests	
IIS_IUSRS	
Network Configuratio...	
Performance Log Users	
Performance Monitor ...	
Power Users	
Remote Desktop Users	
Replicator	
Users	
Administrators (built-i...	
Debugger Users	
IIS_WPG	
Tivoli_Admin_Privileges	

Members:
FDNET\dav14361
FDNET\Domain Admins
FDNET\for32482
FDNET\jac35693
FDNET\jac82885
FDNET\mar49087
FDNET\Priv_Computer_Add_Remove
FDNET\Priv_Deskside_Global
FDNET\Priv_ML_Automation_Admin



SPI Backup via Remote Terminal

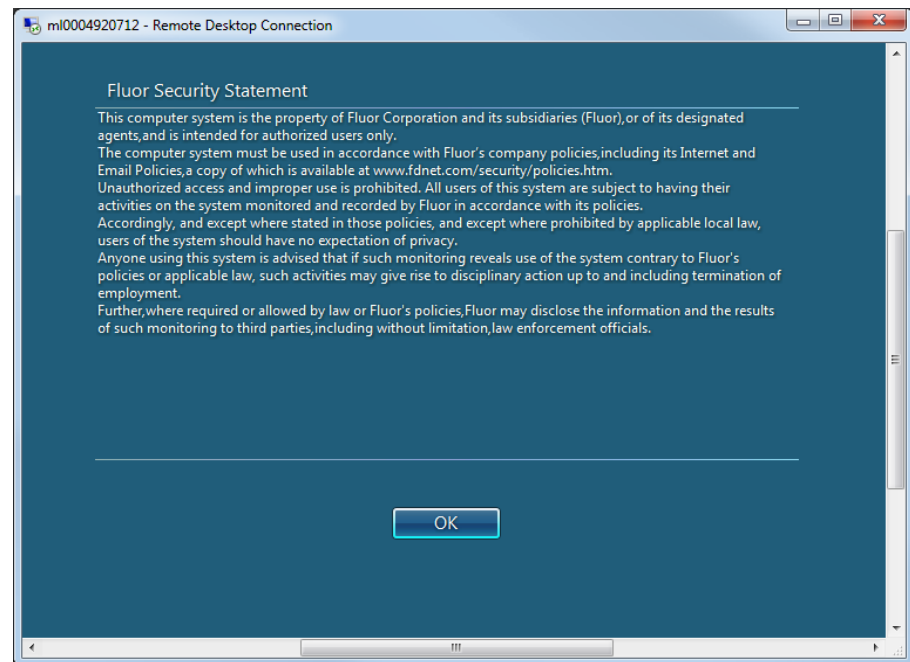
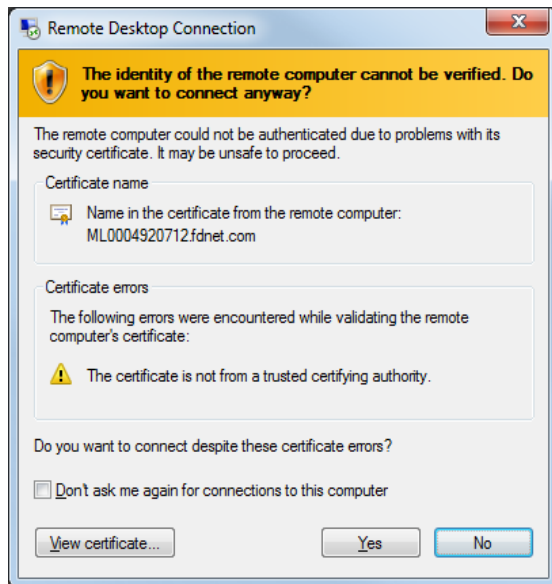
- ◆ Double click on the Remote Desktop connection icon.
- ◆ Confirm login data and machine name. Use your normal network User ID and password to login.





SPI Backup via Remote Terminal

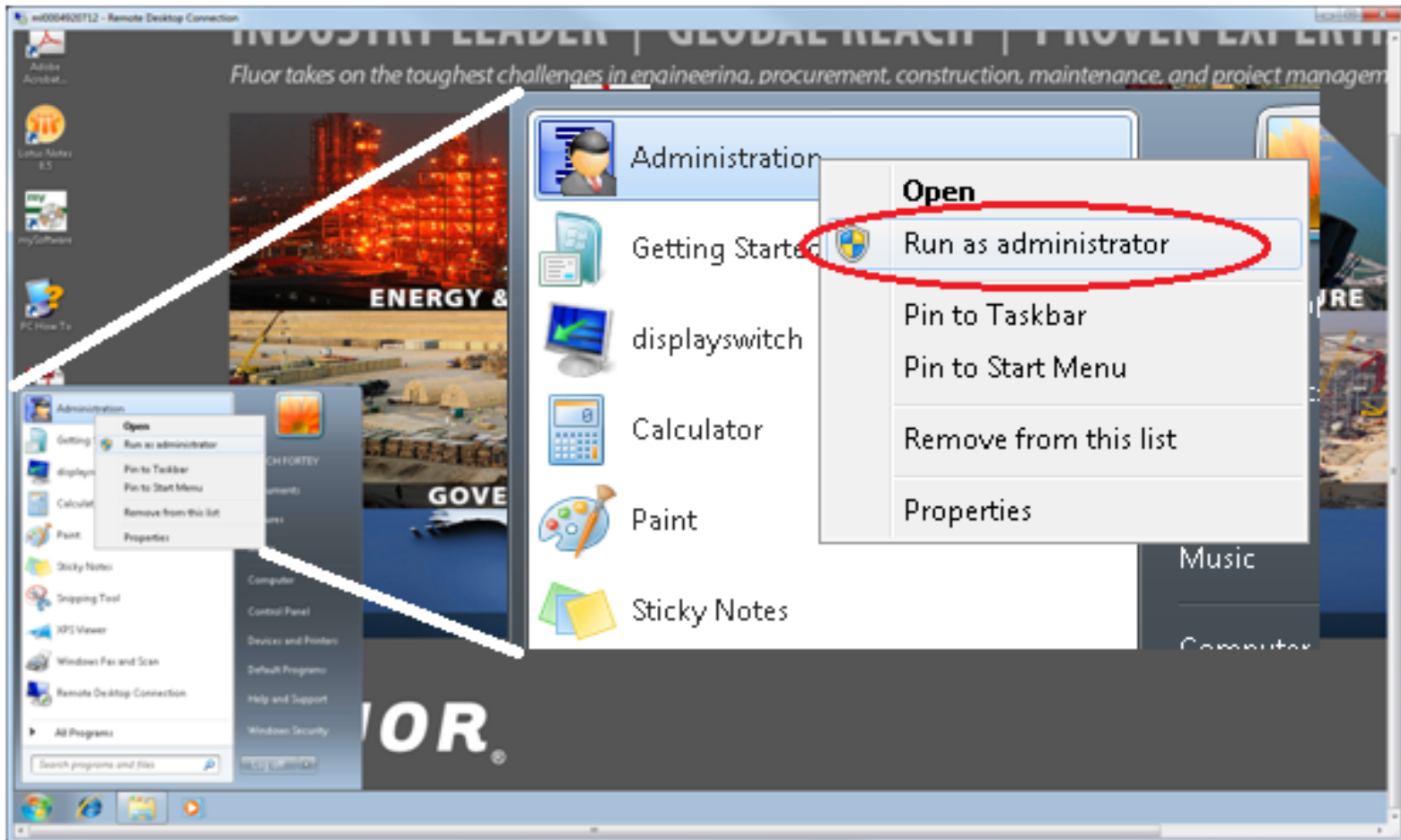
- ◆ Sometimes the PC's Identity cannot be validated by the installed certificate. Click **Yes** to proceed and permit the login to continue.
- ◆ A Firewall security screen may appear. Click OK to continue.





SPI Backup via Remote Terminal

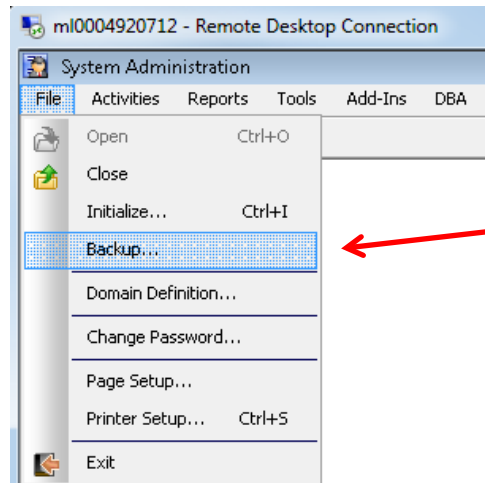
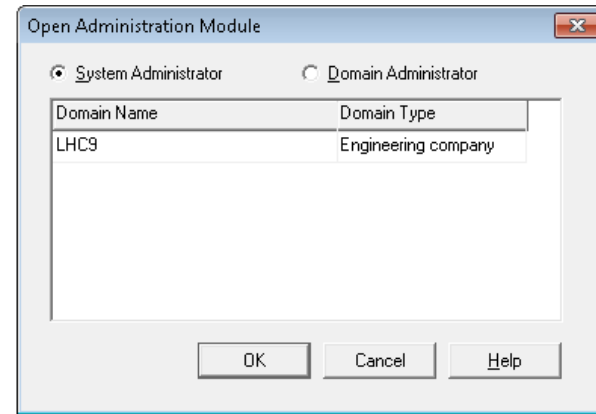
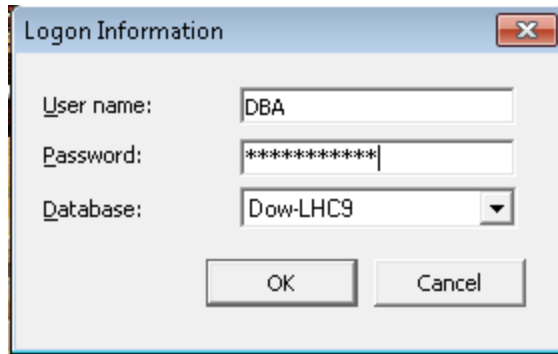
- ◆ Next you see the desktop of the remote (host) PC on your screen. Run the SPI Admin Module AS the Administrator.





SPI Backup via Remote Terminal

- ◆ Login to the Admin module as the DBA administrator then Login as the System Administrator. Select the **File > Backup** pull down.

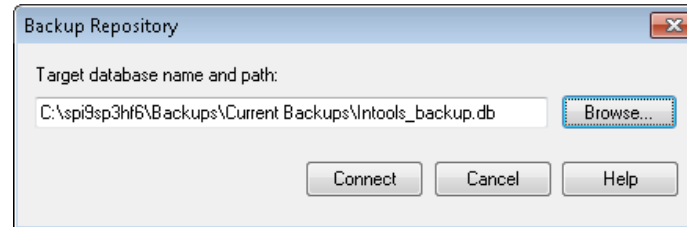


Note: this menu option is only available once per session for selection. If for some reason you select Backup... and then cancel out of the box you will need to Close the System Administration session and open it again (do not log completely out of SPI). Command unavailability is indicated by Backup... being grayed out.

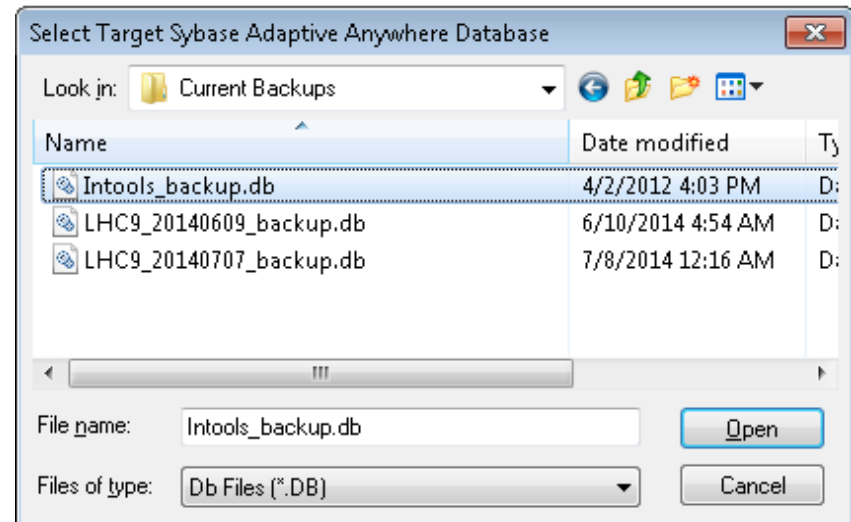
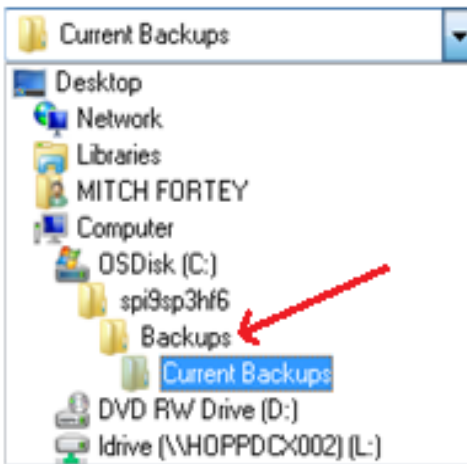


SPI Backup via Remote Terminal

- ◆ In the backup Repository window click on the **Browse...** button to access the existing default backup file DB.



- ◆ Navigate to the location of the master **Intools_backup.db** file (here it is under the “**Backups**” folder shown below (left – not highlighted)). Copy the file to a new location (here “**Current Backups**” folder).





SPI Backup via Remote Terminal

- ◆ Connect to the DB. After a moment the Backup Domain window opens.
- ◆ The **Server:** and **Database name:** populate automatically. Select the proper **Domain** and if needed check appropriate boxes for additional functions. Select **OK** to continue...The Backup Information window opens...

The 'Back Up Domain' dialog box contains the following fields and options:

- Database type: Oracle 10g
- Server: ml9hcsi
- Database name: ml9hcsi
- Admin schema name: IN_DBAMN
- Admin schema password: IN_DBAMN
- Domain: LHC9
- Project: (empty)
- Export as EPC:
- Save last created ID for merging renamed items:
- Copy users to target domain:
- Copy departments to target domain:
- Buttons: OK, Cancel, Help

The 'Backup Information' dialog box contains the following fields and options:

- Target domain definitions: Domain: INtools_Backup
- Target domain type: Owner operator, Engineering company
- Domain schema name: INtools_Backup
- Domain schema password: (masked)
- View Only Domain Schema password: (empty)
- Date: 7/9/2014
- Start time: 03:05:23
- End time: (empty)
- Do not display error messages:
- Status: Operation: Inserting data to tables... Progress: 1 %
- Description: Inserting data to INtools_Backup.ADD_SPEC7 Process: 9918



SPI Backup via Remote Terminal

- ◆ Backup times vary. When the backup is complete (100%) select the **Close** button.
- ◆ Exit the SPI Admin Module.
- ◆ The Intools_backup.db file is on the host server C: drive.
- ◆ Copy and move the file to a network transfer folder. Zipping the file will speed the process. Leave the original file on the host machine and copy and extract the .zip file to the network share. Then rename the files as shown.
- ◆ End of tutorial - Question??

