**Installation**

MSI can be downloaded from [here](http://lists.opcfoundation.org/sites/Members/UA/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fsites%2fMembers%2fUA%2fShared%20Documents%2fUA%20Code%20Deliverables%2fDSATS&FolderCTID=&View=%7bE4CC7E36%2d7D75%2d4469%2dBAD5%2d2F2FC9333917%7d).

Instructions for accessing the above link are [here](https://www.opcfoundation.org/Default.aspx/01_about/SharePointLoginFAQ.asp?MID=UserAccount).

“OPC UA DSATS Demo Setup.msi”

Installs Source code in: [LocalAppDataFolder]\OPC Foundation\DSATS

Installs Configuration files in: [CommonAppDataFolder]\OPC Foundation\DSATS

Installs Executable files in: [ProgramFilesFolder]\OPC Foundation\DSATS\Bin

CommonAppDataFolder:

XP: C:\Documents and Settings\All Users\  
Vista/Win7: C:\ProgramData\

LocalAppDataFolder:

XP: C:\Documents and Settings\<User>\Application Data  
Vista/Win7: C:\Users\<User>\AppData\Local\

Certificates are created, Firewall ports are opened.

OPC UA SDK 1.01 Test Applications Setup.msi must be installed in a separate step.  
It installs the Sample Server and Sample Client.

**Configuration**

Configuration Files:

DsatsDemoAccessControl.txt

All accounts with read access to this file are treated as admins.

Use Windows Explorer to set the permissions

DsatsDemoClient.Config.xml and DsatsDemoServer.Config.xml

Application configuration files.

DsatsDemoServer specifies endpoints

DsatsDemoServer.log.txt and DsatsDemoClient.log.txt

Log files

File contains error information if something does not work.

<TraceConfiguration> element in application configuration can increase trace level.

Tutorial on configuring certificates:

<http://www.opcfoundation.org/DownloadFile.aspx?CM=3&RI=682>

DataSource.xml:

Enter the mapping to NodeIds for the NOV server.

Specify phases and locks;

Specify tools;

Schema installed in:

C:\Users\<User>\AppData\Local\OPC Foundation\DSATS\Source\Workshop\DSATS\Server\Schema

More comments in the file itself.

**Operation**

Start the DSATS server.

Start the DSATS admin client.

Start the Sample Client

Admin Client features:

Change User:

Enter a valid NT username/password and click ‘Apply’

Access permission on DsatsDemoAccessControl.txt determine whether user is Admin

Change Phase:

Select the new phase and click ‘Change’

Lock/Approve/Unlock

Select a Lock and right click.

Choose command from menu.

Each Tool has a WatchdogCounter variable.

This variable must be wired to the Counter for the Tool in the NOV server in DataSource.xml

Clients with the lock are responsible for incrementing the counters for all of the tools that they are using. Only the client who holds the lock for the current phase will be allowed to do this.

If the phase changes and a tool is not being operated the NOV server must detect this and respond accordingly. The Comm Box does not enforce this logic since the NOV server has to implement it anyways.