

Installing Workflow Solution 6.5 Advanced

Outline of installation steps:

- 1) Install .NET Framework 3.5 SP1
- 2) Install IIS 6.0 and ASP.NET 2.0
- 3) Install Microsoft SQL Server 2005 SP2 Express Edition with Advanced Services
- 4) Install Notification Server 6.0 SP3
- 5) Install Workflow Solution into Notification Server
- 6) Install Workflow Advanced Server, Designer and Process Manager
- 7) Add and assign Workflow licenses (optional)
- 8) Initial configuration of Process Manager

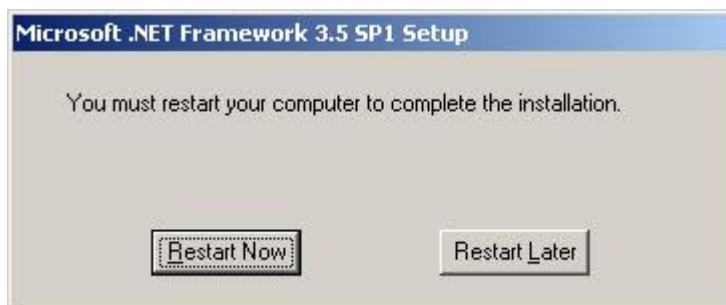
This installation guide is intended to cover several different installation scenarios in a comprehensive manner. It is designed to offer a step-by-step walkthrough of how to install Workflow Solution and to answer frequently asked questions along the way. The document was composed in January of 2009. Generally speaking, the latest version of each installation item was used. Newer versions may be available at the time you read this, and may accordingly vary these instructions. Also note, some items (for example the .NET Framework) may already be installed on your system. If this is the case with a particular item, you can generally skip that step.

The baseline machine that is used in this document has Windows Server 2003 Enterprise Edition, Service Pack 2, with nothing else installed. If you have a different operating system or configuration than this, the following instructions may vary somewhat for you.

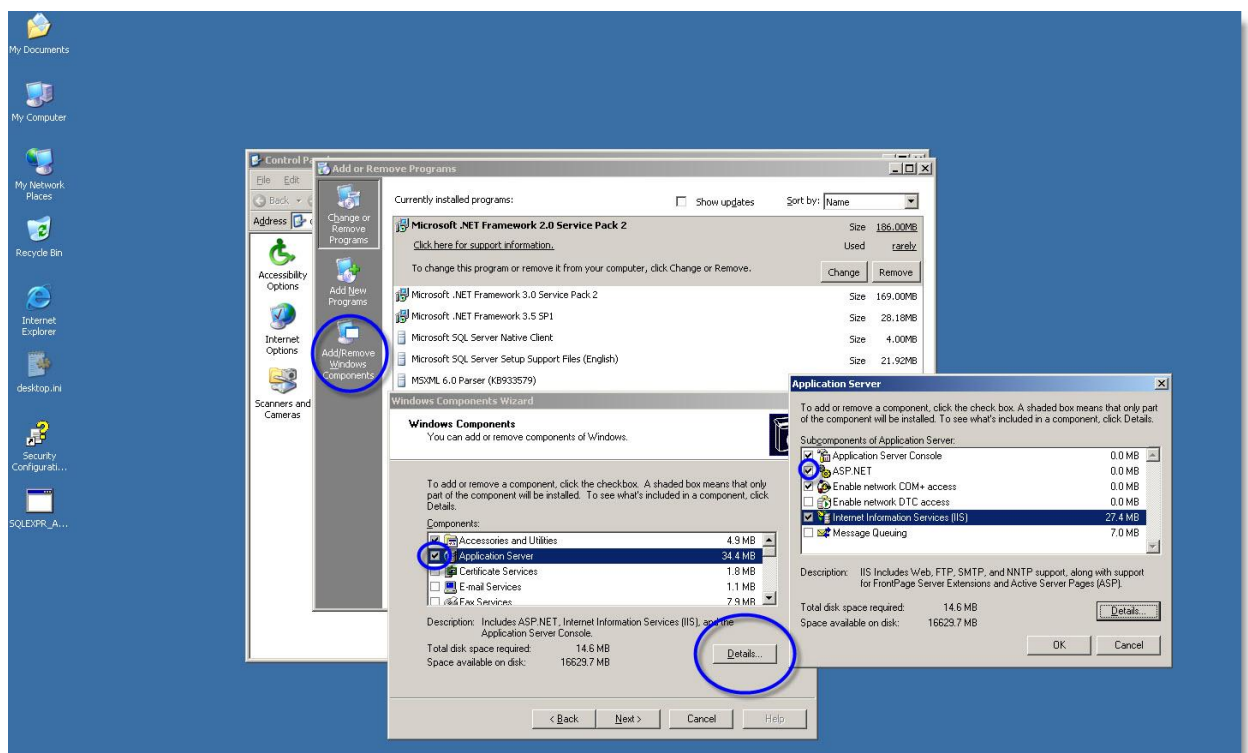
- 1) Install .NET Framework 3.5, Service Pack 1. (This installation is a pre-requisite to installing Notification Server 6 and Workflow Solution 6.5.) This file, dotnetfx35setup.exe (stub) or dotnetfx35.exe (full setup), can be downloaded from:
<http://www.microsoft.com/downloads/details.aspx?familyid=ab99342f-5d1a-413d-8319-81da479ab0d7&displaylang=en>.



You may be prompted to reboot the server after .NET Framework 3.5 is installed. If so, click Restart Now to restart the computer.



- 2) Install Internet Information Services (IIS) 6.0 and ASP.NET 2.0. (IIS 6.0 is a pre-requisite for Notification Server 6.0 and for Workflow Server 6.5; ASP.NET 2.0 is specifically needed for Workflow Server; Notification Server runs on ASP.NET 1.1.) These are Windows Server components that can be added to the base installation of Windows Server 2003.
 - a. Go to Control Panel / Add or Remove Programs, click Add/Remove Windows Components, checkmark Application Server and, while still highlighted, click the Details button.
 - b. Checkmark ASP.NET (and verify that at a minimum, the other items are checkmarked as in the screenshot below). You will need to be able to access the operating system files for IIS to get installed (e.g. by putting the Windows CD in).



- c. By default, IIS will choose the highest available ASP.NET version for each website; yet, to execute properly, Notification Server needs to use ASP.NET version 1.1, not the higher version 2.0. So once IIS and ASP.NET are installed, we need to verify that the Default Web Site (which will host Notification Server) is using ASP.NET 1.1.
 - i. Go to Administrative Tools / Internet Information Services (IIS) Manager.
 - ii. Under Web Sites, right-click on Default Web Site and select Properties. Click on the ASP.NET tab and, in the "ASP.NET version", select the 1.1.4322 version from the drop list. Click OK.
 - iii. In the IIS Manager, go to Web Service Extensions and make sure that both ASP.NET v1.1.4322 and ASP.NET v2.0.50727 are allowed.

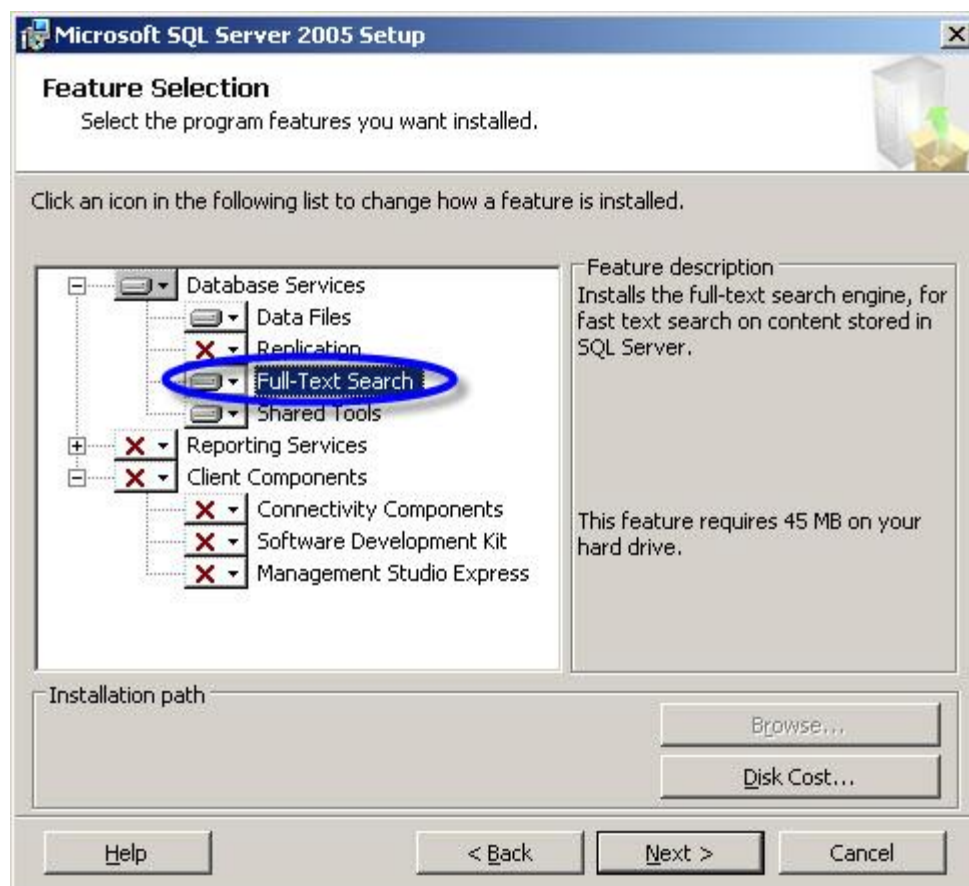
- 3) Install Microsoft SQL Server 2005 Express Edition with Advanced Services, Service Pack 2. (This installation is a pre-requisite to installing Notification Server and Workflow Solution Advanced.)

This file, SQLEXPRESS_ADV.EXE, can be downloaded from:

<http://www.microsoft.com/downloads/details.aspx?familyid=5B5528B9-13E1-4DB9-A3FC-82116D598C3D&displaylang=en>.

This document is not intended to cover all possible SQL Server installation scenarios—please refer to Microsoft documentation for further reference. For the purposes of this installation guide, we accepted all of the defaults during the SQL installation except where noted by the screenshots below.

NOTE: If you would like to point to an existing SQL database instead, e.g. one that is already installed in your environment and can be seen from the Workflow server, you can skip this step. You can install the base edition of SQL Server Express 2005 if you prefer; however, the Process Manager portal in Workflow Solution 6.5 Advanced takes advantage of the full-text search capabilities of the Advanced Services version of SQL Express. If you only have the base edition installed, you will be unable to use this feature. SQL Server 2005 Standard Edition or greater is supported as well.



- a. Choose Mixed Mode authentication for greater flexibility.
- b. Enter and confirm a password for the administrator ("sa") account.



The screenshot shows the 'Authentication Mode' window from the Microsoft SQL Server 2005 Setup. The window has a title bar with the text 'Microsoft SQL Server 2005 Setup' and a close button. Below the title bar, the heading 'Authentication Mode' is followed by a descriptive sentence: 'The authentication mode specifies the security used when connecting to SQL Server.' To the right of this text is a small icon of a server rack with a green arrow pointing upwards. Below this, a prompt says 'Select the authentication mode to use for this installation.' There are two radio button options: 'Windows Authentication Mode' (which is unselected) and 'Mixed Mode (Windows Authentication and SQL Server Authentication)' (which is selected). Below these options, a section titled 'Specify the sa logon password below:' contains two text input fields. The first field is labeled 'Enter password:' and the second is labeled 'Confirm password:'. Both fields contain a series of asterisks (*****). At the bottom of the window, there are four buttons: 'Help', '< Back', 'Next >', and 'Cancel'.

Microsoft SQL Server 2005 Setup

Authentication Mode
The authentication mode specifies the security used when connecting to SQL Server.

Select the authentication mode to use for this installation.

☐ Windows Authentication Mode

☒ Mixed Mode (Windows Authentication and SQL Server Authentication)

Specify the sa logon password below:

Enter password:

Confirm password:

Help < Back Next > Cancel

- c. Checkmark “Add user to the SQL Server Administrator role” to grant your user account system administrator privileges to this instance of SQL Server.



- 4) Install Altiris Notification Server 6, Service Pack 3. (This installation is a pre-requisite for Workflow Solution, as it allows Workflow Solution to validate licensing.) Notification Server will be referred to as NS throughout this document.

NOTE: more configuration options and advanced installation topics are covered in the Altiris Notification Server 6.0 SP3 Help file, found here:

<http://www.altiris.com/upload/notificationsp3.pdf>

The setup file is named altiris_ns_6_0.exe and can be downloaded from:

http://www.solutionsam.com/solutions/6_0/. You can accept all of the installation defaults up until this dialog, where you need to enter a local administrator username and password:

Altiris Console 6.0 Setup Wizard - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Go Links

Address <http://localhost/Altiris/NS/Install/NSSetup.aspx>

User Identity Settings

Enter the user name and password of the account which will be accessing the Altiris Notification Server.

Note: This account must have local administrator rights on the Altiris Notification Server computer.

User (domain\user): CLEANW2K3SRV\Administrat

Password: [Masked]

altiris Altiris Console 6.0 Setup Wizard Step 1 of 4

Back Next Cancel

Done Local intranet

- a. You can leave all of the settings on this dialog blank if you aren't concerned with getting email notifications from system events, or you can optionally fill in this information:

E-mail Settings
Enter the e-mail address of the person who should receive e-mail notifications from events within the system, the server the system should use for those messages, and any necessary credentials.

E-mail address: The default e-mail address that will receive notifications.

SMTP server: The hostname (For example, corp or mail) or IP address of the SMTP server that receives incoming messages.

SMTP port: TCP port of the SMTP server.

From Address: The e-mail address of the sender of any e-mail notifications.

User name: If you have a protected SMTP gateway, enter an authorized user name and password.

Password:

Altiris Console 6.0 Setup Wizard
Step 2 of 4

Done Local intranet

- b. Indicate the database server as <servername>\<instance name>, as shown below.

Note: Don't be alarmed if at first you see a message which says "Failed to get the list of available databases, check your database credentials". We simply need to point the installation to the proper database name, which will depend on where your database resides. For example, if you installed SQL Server Express 2005 in the prior steps and accepted all of the defaults, then your instance name for the database will be SQLEXPRESS.

Altiris Console 6.0 Setup Wizard - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Go Links

Address <http://localhost/Altiris/NS/Install/NSSetup.aspx>

SQL Database Settings

Enter the database server name, the database name, and the database credentials

Database Server
Server name:
If you did not install SQL Server as the default 'instance', then when specifying the server you need to use the following format: `servername\instancename`.

Database Credentials
☒ Use application credentials
☐ Use SQL Login
Login ID:
Password:

Database Name
☐ Use existing database:
☒ Create new database:

Command timeout: seconds

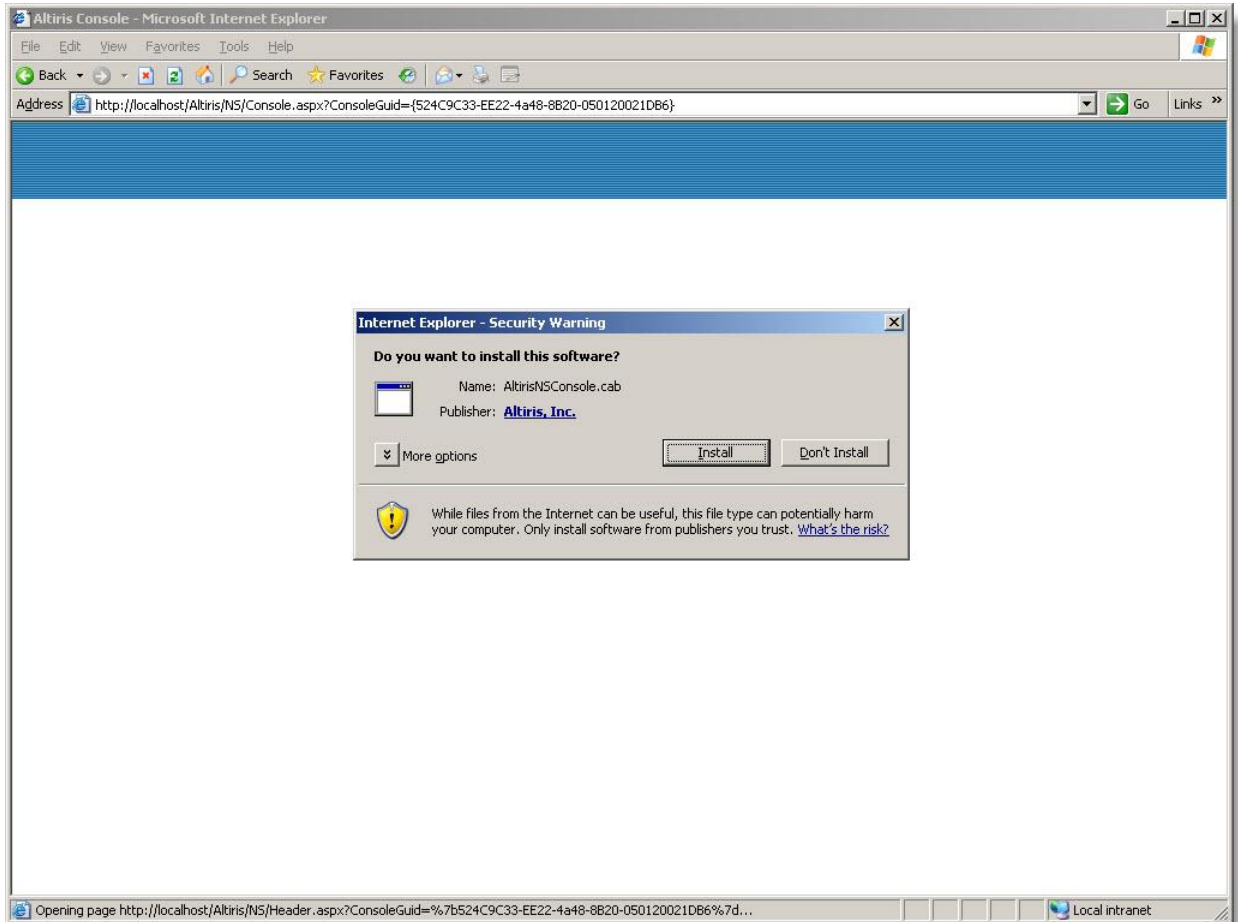
Failed to get the list of available databases, check your database credentials

altiris Altiris Console 6.0 Setup Wizard Step 3 of 4

Back Next Cancel

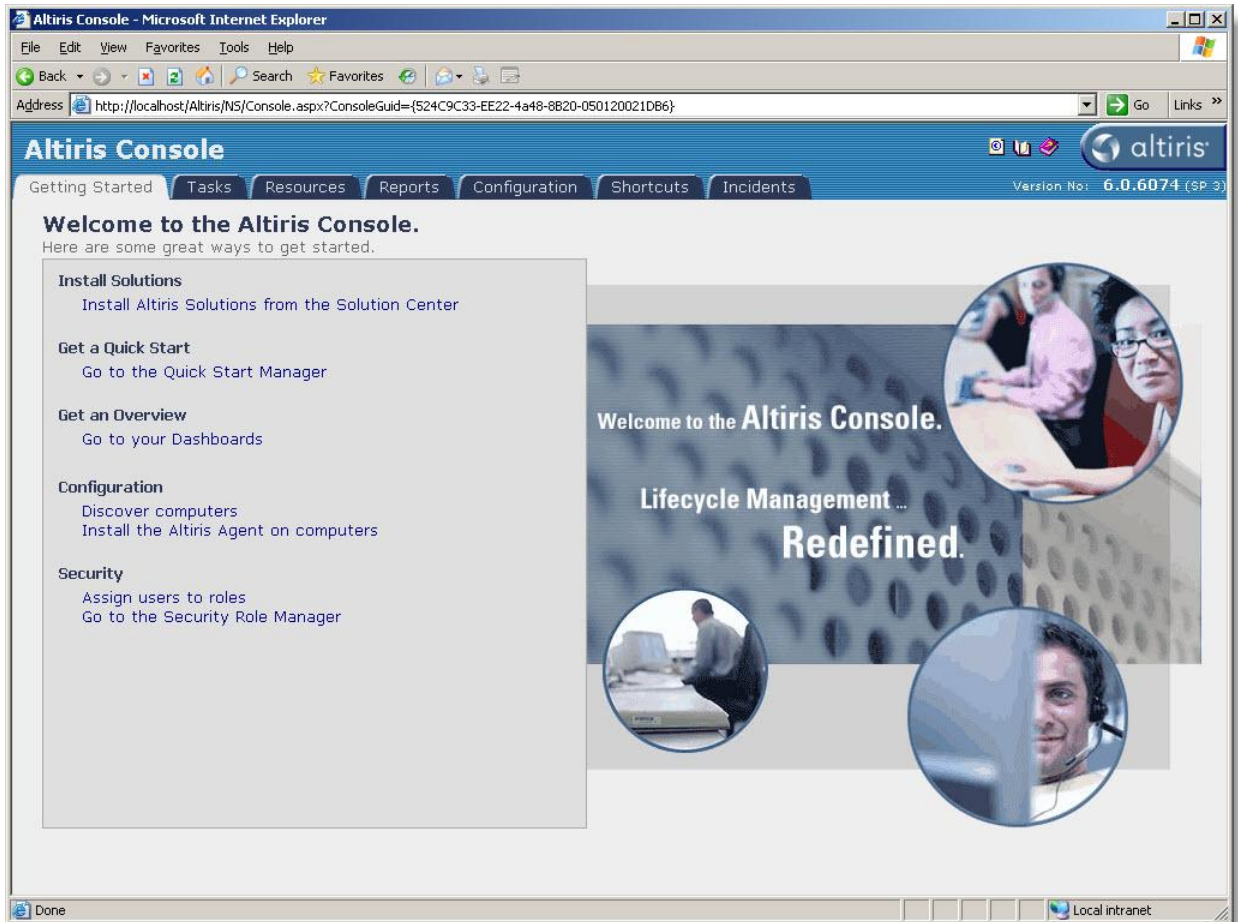
Done Local intranet

- c. Click Next, and then Finish, to proceed with the Altiris database creation.
- d. When prompted, click Install to install a Notification Server console ActiveX control:



Note: There is another update which is necessary to bring Notification Server up to its current patch level (Release 9 as of this writing, which is KB 39160), but installing Workflow Solution will automatically install this hotfix roll-up.

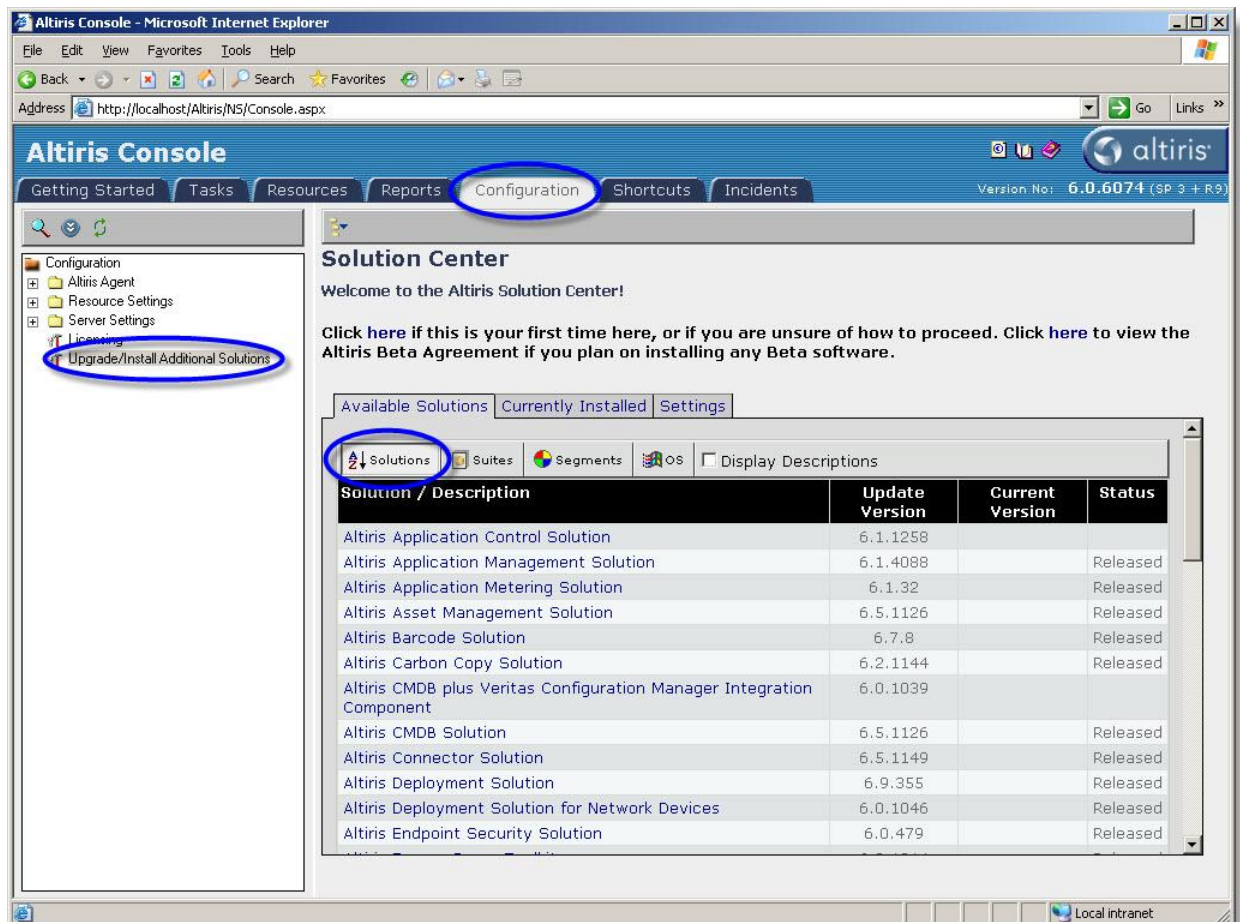
e. Close the browser once you see this screen:



The Altiris Agent Installation Service, which installs the Altiris Agent locally on the Notification Server, runs when the Notification Server installation is finished. You should see the Altiris Agent running in the system tray within a few minutes of the NS installation finishing (this screenshot shows what the agent icon looks like).



- 5) Now that all of the pre-requisites are installed, it is time to install Workflow Solution. It should be noted that there are really two parts to the installation of Workflow. First, we will install “Workflow Solution” into Notification Server. This will NOT install the Workflow Designer, Server, and Process Manager, which are necessary to design, execute and manage your Workflow projects. Installing Workflow Solution will only install the necessary components and tabs within Notification Server so that we can then install Workflow Designer/Server/Process Manager in our environment, assign licenses, etc. Once Workflow Solution is installed within NS, then we can install the Workflow program itself.
- Open Notification Server (Start / Programs / Altiris / Altiris Console).
 - Go to the Configuration tab, Upgrade/Install Additional Solutions.
 - Click Solutions on the Available Solutions tab.



- d. Scroll down and click on the Altiris Workflow Solution link.

Altiris Console - Microsoft Internet Explorer

Address: http://localhost/Altiris/NS/Console.aspx

Altiris Console

Getting Started Tasks Resources Reports Configuration Shortcuts Incidents

Version No: 6.0.6074 (SP 3 + R3)

Solution Center

Welcome to the Altiris Solution Center!

Click [here](#) if this is your first time here, or if you are unsure of how to proceed. Click [here](#) to view the Altiris Beta Agreement if you plan on installing any Beta software.

Available Solutions Currently Installed Settings

Altiris Patch Management Solution for Windows	6.2.3644	Released
Altiris Recovery Solution	6.2.2801	Released
Altiris Removable Storage Security Solution	6.0.479	
Altiris Security Solution for Handhelds	6.1.1039	Released
Altiris Software Delivery Solution for Mac	6.1.2032	Released
Altiris Software Delivery Solution for Pocket PC	6.1.1141	Released
Altiris Software Delivery Solution for UNIX and Linux	6.1.3006	Released
Altiris Software Delivery Solution for Windows	6.1.1058	Released
Altiris Software Virtualization Solution	2.1.3062	Released
Altiris Task Management Pack	6.0.1033	Released
Altiris Task Server	6.0.1404	Released
Altiris Wireless Security Solution	6.0.479	
Altiris Wise Toolkit	6.1.3	Released
Altiris Workflow Solution	6.5.2	
Livestate to Altiris P...	1.0.1033	
Symantec Backup Exec System Recovery Integration	6.5.0	
Symantec Endpoint Protection Integration Component	6.0.1171	

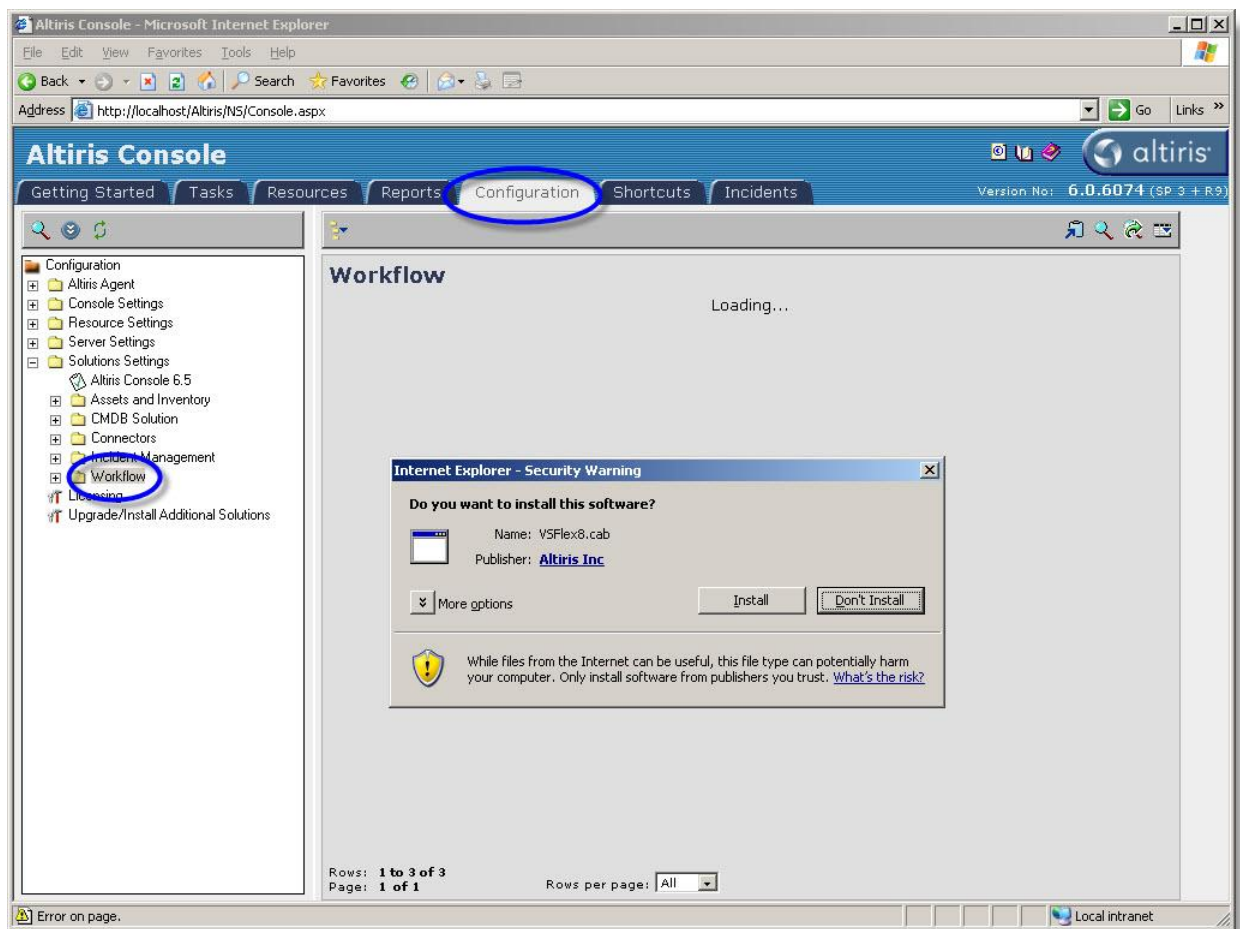
javascript: __doPostBack('scSuiteAdd','{3BA17E65-7074-4B17-85D7-B968627371C5}')

Local intranet

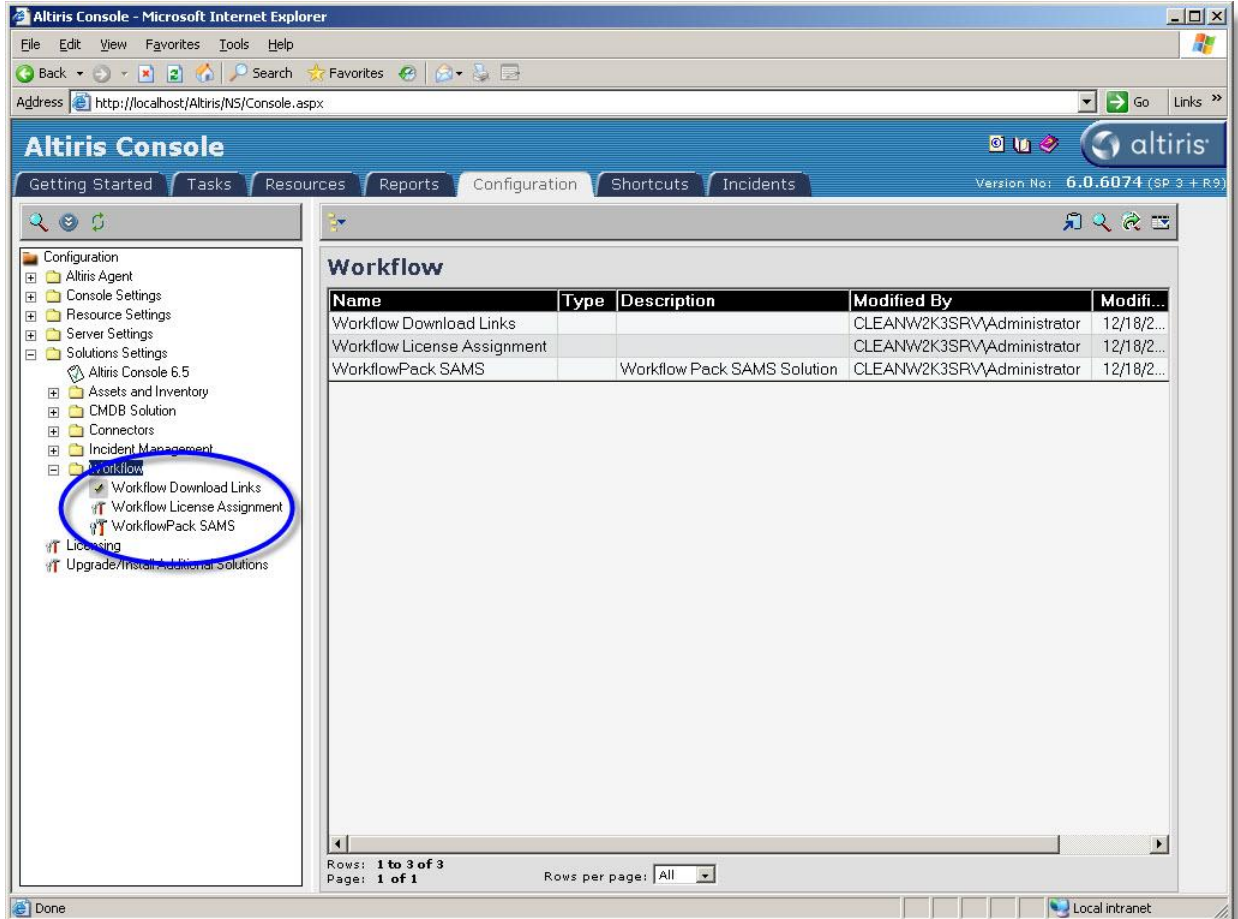
- e. Click Start to begin the installation process (which should require no interaction).



- 6) Once the installation of Workflow Solution is finished, you may need to close the Notification Server browser, or at a minimum refresh it, to see all of the changes that were made during the Workflow Solution installation. Remember that you can re-open the browser from Start / Programs / Altiris / Altiris Console.
- a. Once refreshed, click Configuration / Solution Settings / Workflow. There should be three nodes underneath this, Workflow Download Links, Workflow License Assignment, and Workflow Pack SAMS.
 - b. If prompted to install another ActiveX control , click Install to let this component install.



Once this ActiveX component is installed, you should be able to see three nodes underneath the Workflow node, as such:



NOTE: For production environments, it is highly recommended to install Workflow Server on a different machine than that which hosts Notification Server. However, for evaluation purposes or simple test environments, you are able to install them on the same server, with some minor configuration changes in IIS. This topic is covered in Altiris KB article 40939, <https://kb.altiris.com/article.asp?article=40939&p=1>. **If you will be installing Workflow Server on the same machine as NS, perform steps 1-6 in this article at this time.** Step 7 will be done once Workflow Server is installed (the proper time for this will be noted later in this document).

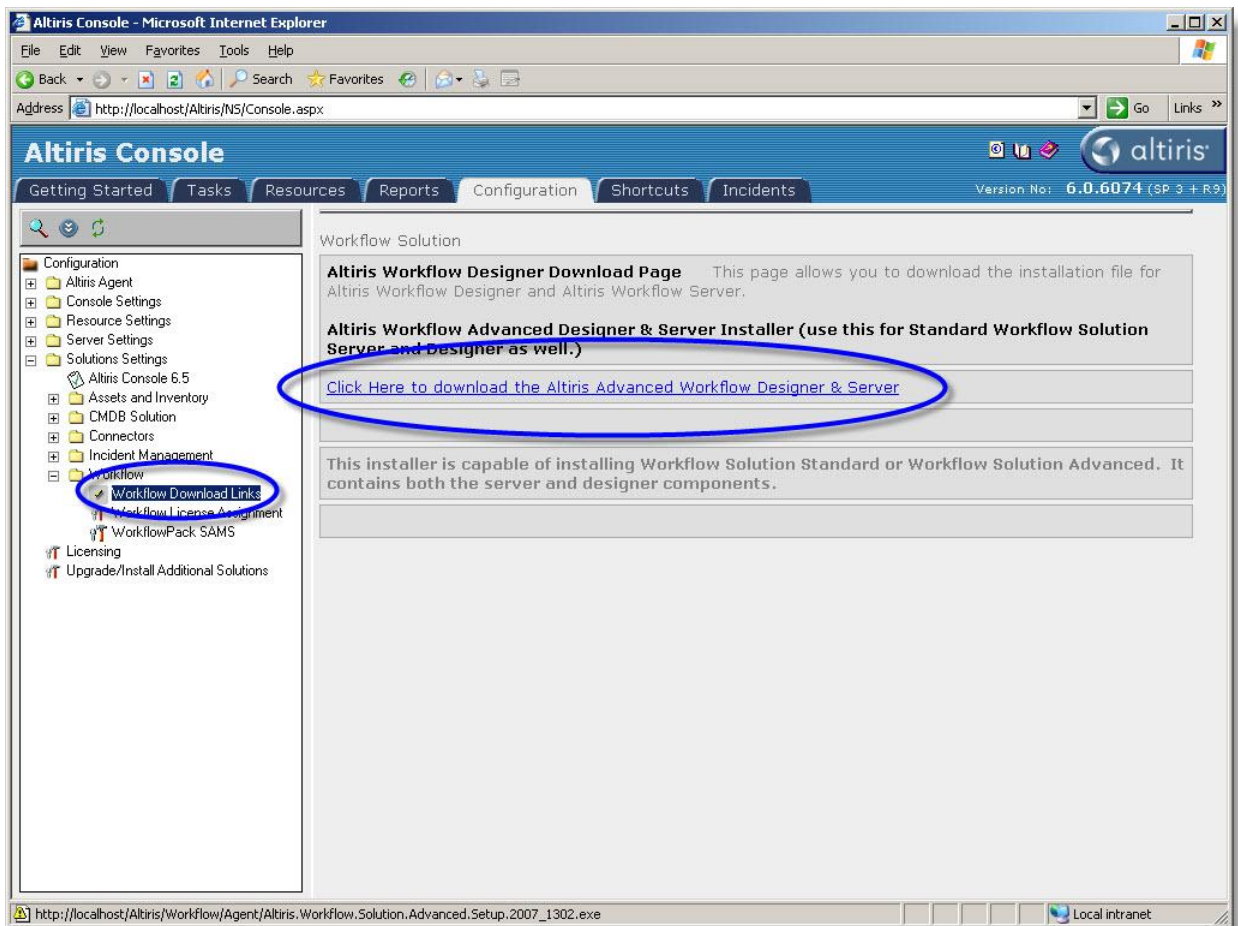
Next, install Workflow Server and Designer from Workflow Download Links tab.

NOTE: Occasionally, clicking on the Workflow Download Links and/or Workflow License Assignment link may display a 404 error. If this occurs, follow KB 44284, "HTTP 404 error when accessing Workflow License Assignment", to fix the 404 error. Although these steps should enable you to see these links, as a worst case, you can always access the installer file from

C:\Program

Files\Altiris\Workflow\Web\Agent\Altiris.Workflow.Solution.Advanced.Setup.2007_1302.exe.

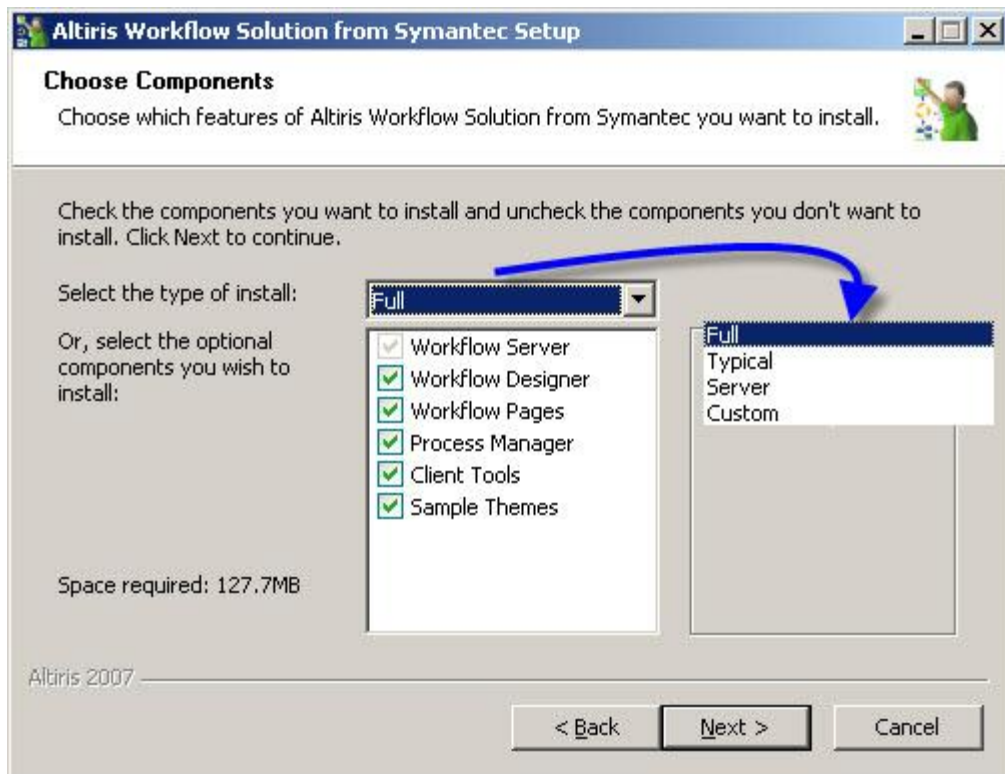
This file will be there if you have installed Workflow Solution into NS per the steps earlier in this document.



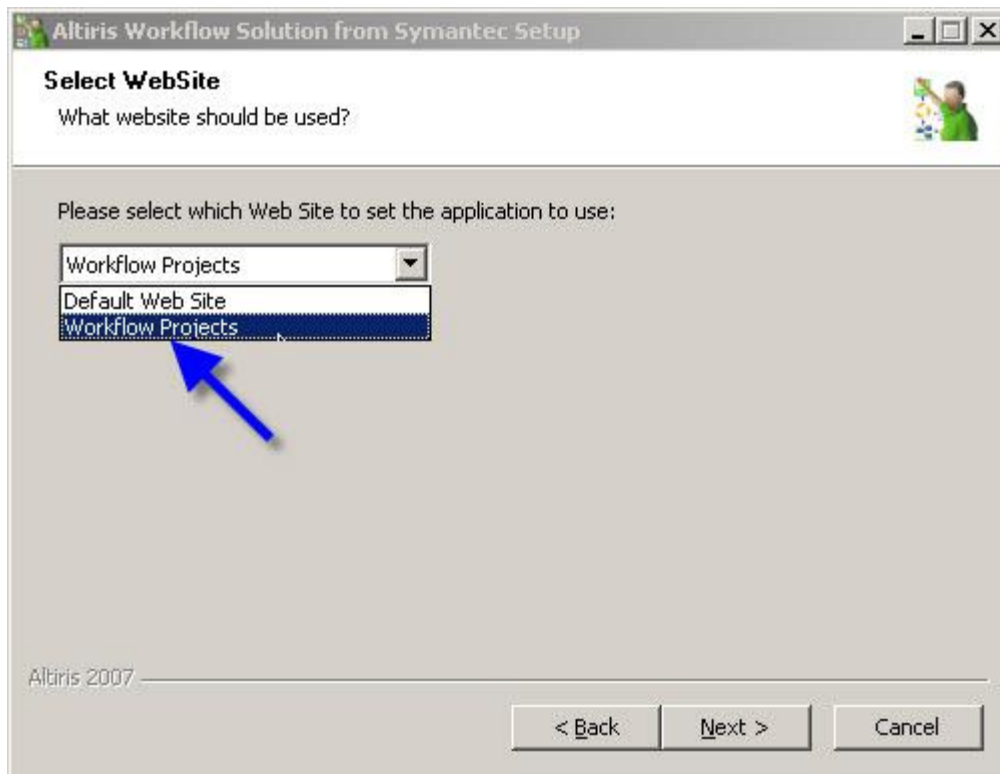
Once you have access to the setup file either directly from NS or from the local path, run the installation.



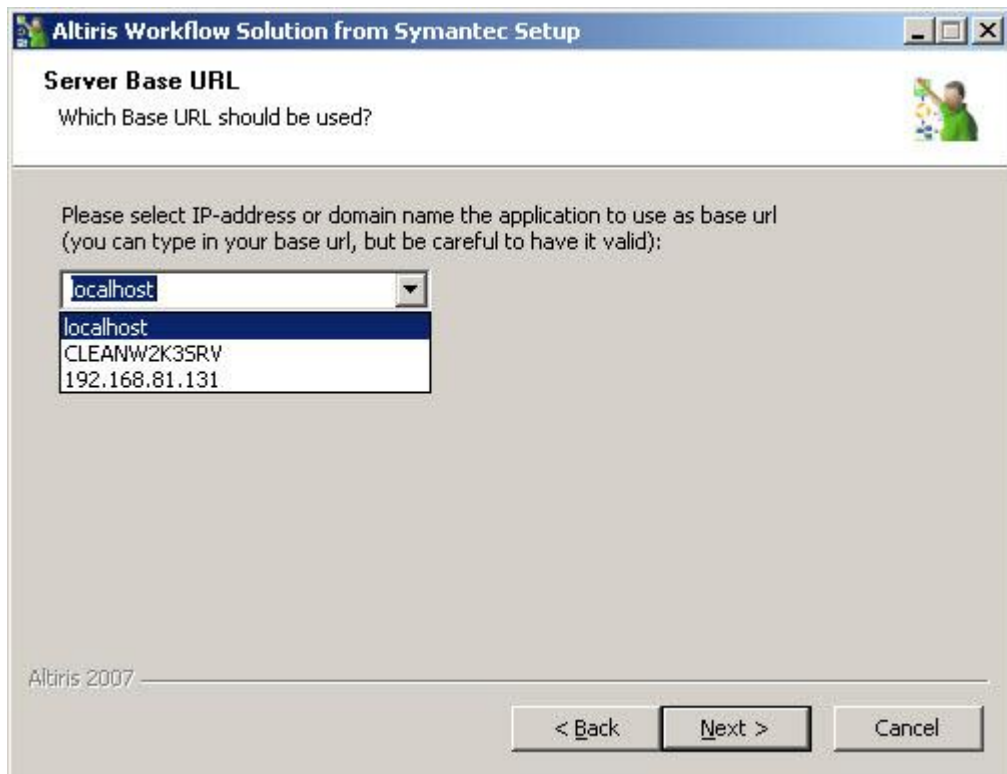
This document will assume a “Full” installation is being performed, meaning we will install Workflow Server, Workflow Designer, and Process Manager on one server. In a production environment, you may separate these items out and install them on different machines. Regardless of your installation choices, Workflow Server is always installed...think of it as an infrastructure piece of Workflow that is always present.



If you are installing Workflow Server on the same machine as Notification Server, and you have followed the instructions listed above from KB article 40939, you should be presented with a dialog which asks which website in IIS you want Workflow projects to use. Select Workflow Projects, as this is the new website we created to use ASP.NET 2.0, the version that Workflow requires.



On the Server Base URL dialog, you can designate the base way that a published workflow will be reached. If you are only running projects in the debugger or testing things locally, localhost will work as a base URL. However, if you plan on connecting to published Workflow projects from other machines, do not use localhost here, because that address will not be reachable from another machine. Instead, use the IP address, machine name, or a domain name that will reach this server. Do not use IP address if the machine has a dynamic IP address, as the IP address will change over time.



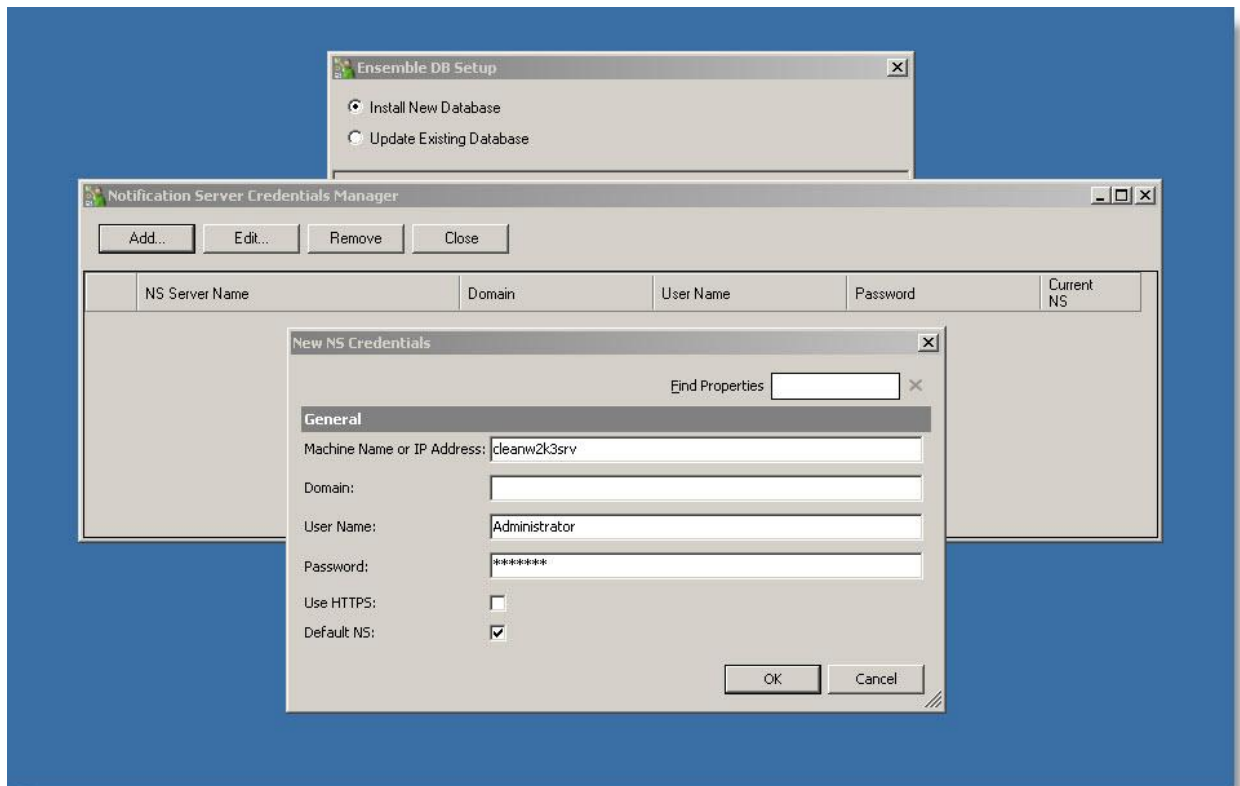
Accept all other installation defaults. Once the installation is near completion, you are presented with a dialog which asks you to use the Notification Server Credentials Manager to connect to your NS. Workflow Designer always has to point to an active NS that has Workflow Solution installed, to determine if it is licensed to publish projects or not. Click OK on this dialog to proceed.



NOTE: Sometimes, there are two instances of the Credentials Manager open...check to see if this is the case (look at the Windows task bar for “Notification Server Credentials Manager”), and if it is open twice, close one of the two before proceeding. This will ensure that your settings persist.

Click Add on the Notification Server Credentials Manager to add credentials for your NS. If Workflow Server is being installed directly on the NS, you can use localhost or the machine name in the first field, and leave Domain blank. If NS is on another machine, you will need to use the machine name or static IP address of that machine, as well as adding in the domain. The User Name and Password fields will typically be of a local Windows administrator account on the NS. If the NS is set to use HTTPS (it uses HTTP by default), you will need to checkmark that option as well for this connection to work.

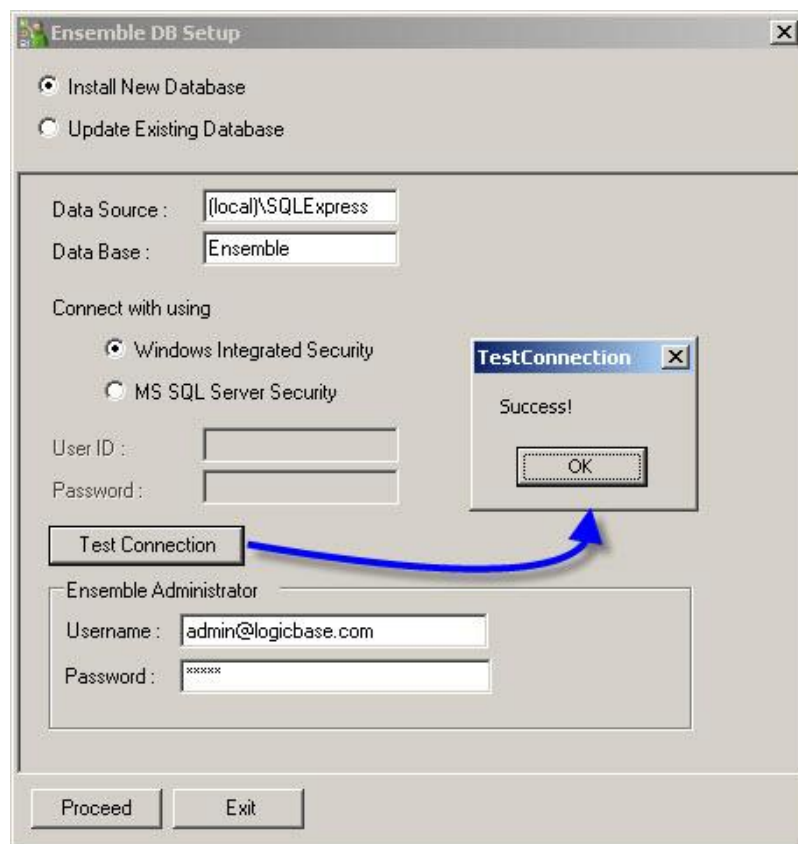
NOTE: More than one credential can be added in the Credentials Manager. You can toggle between them using the Default NS checkbox option to specify which one you currently want to use.



The Workflow installation will create a database in SQL Server. The default name of the database is Ensemble, but can be changed in this dialog. The database is used by Process Manager, and can optionally be used by Workflow Server for storage (see Storage Preference Configuration dialog below).

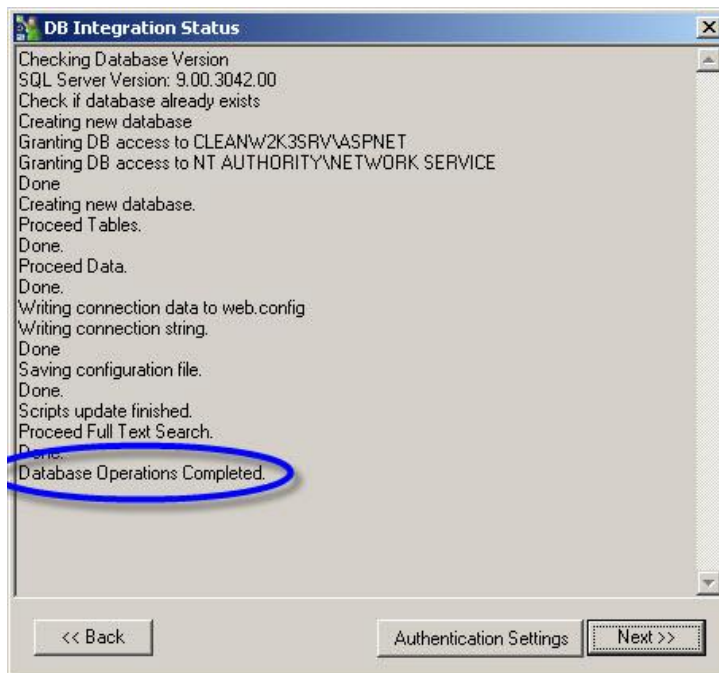
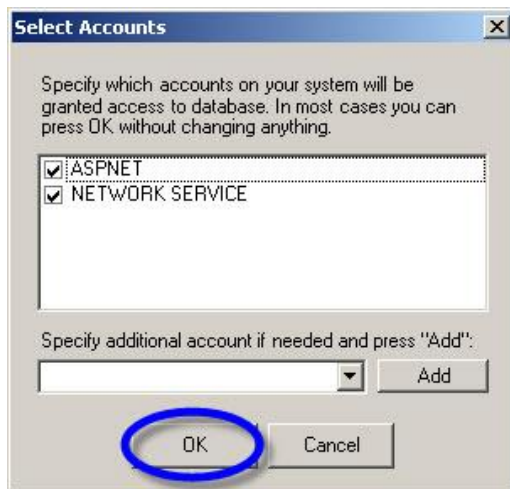
If you have installed SQL Express on this machine as per the above instructions, you can use (local)\SQLEXPRESS as the Data Source in the Ensemble DB Setup dialog. If SQL Server is on another machine, you should be able to connect by entering the name of the server on which SQL Server is running, if it is using a default instance. If it is using a named instance, then try <servername>\<instance name>. Use the Test Connection button to test the syntax of your parameters. You will not be able to proceed with the database creation until you get the connection to test successfully.

NOTE: The user name and password for the default Process Manager user can be changed in the Ensemble Administrator section. The default username is admin@logicbase.com and the default password is admin. It is recommended that you change both the username and password for security reasons. If you do change these fields, make sure to note your new settings, as this username and password will be your only way to log into Process Manager.

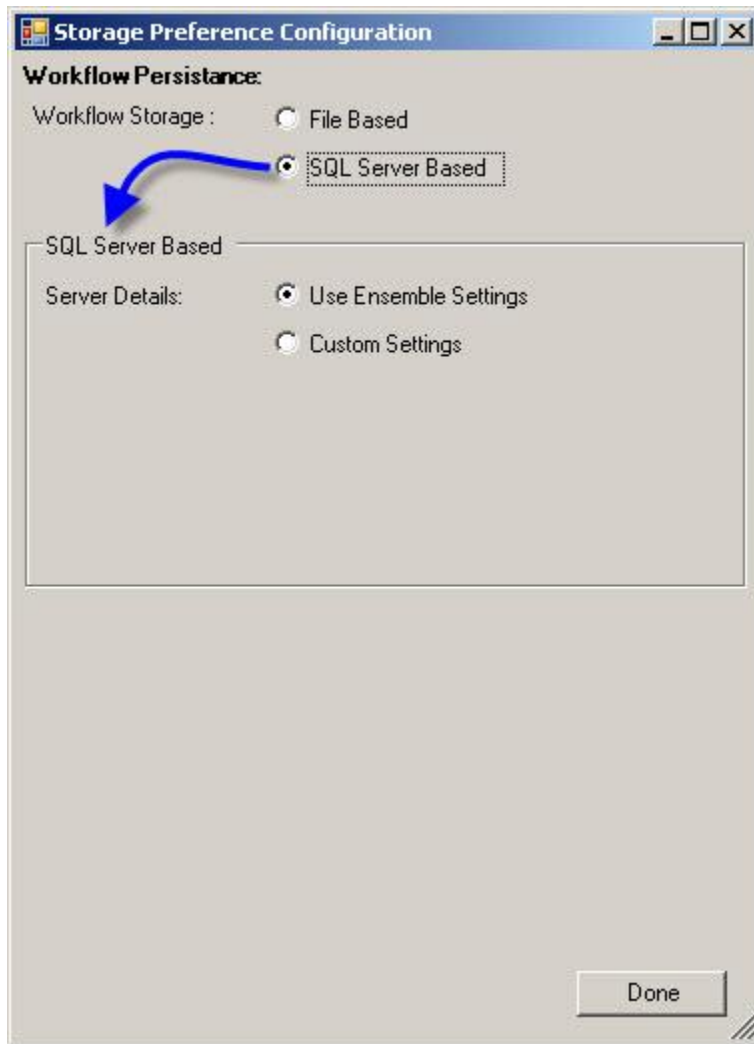


The database creation will be finished when you see Database Operations Completed on the DB Integration Status dialog. Click Next to proceed with some additional configuration items.

NOTE: If the database creation fails for whatever reason, you can follow Altiris KB article 44116, <https://kb.altiris.com/article.asp?article=44116&p=1>, to manually create the database. If you need to update an existing database or would like to run through this Ensemble DB Setup wizard at a later time, you can run it manually from C:\Program Files\Altiris\Workflow Designer\Ensemble\dbtool.exe.



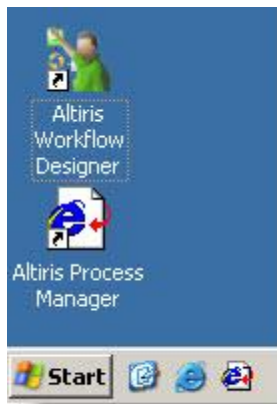
It is typically recommended to choose SQL Server Based Workflow storage on the Storage Preference Configuration dialog,. The storage this refers to is runtime storage for Workflow process information, i.e. the storage that is necessary to let long running Workflow processes have data persist through server reboots, outages, etc.



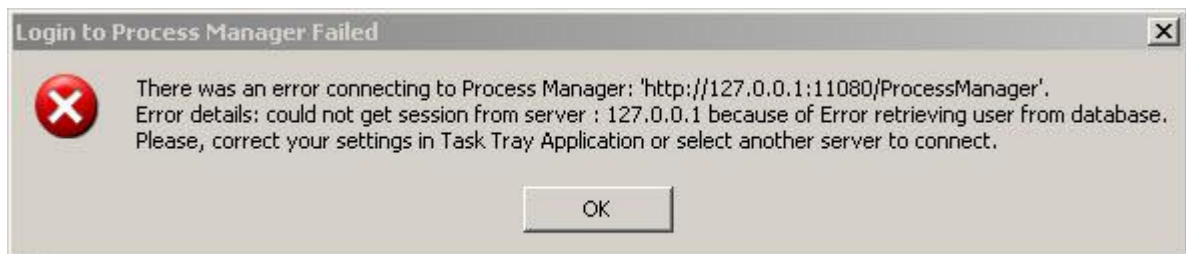
If you are installing Workflow Server on the same machine as NS, you will now need to follow the instructions for step 7 from KB 40939 (earlier in the process you should have completed steps 1-6). The KB article can be found here:

<https://kb.altiris.com/article.asp?article=40939&p=1>

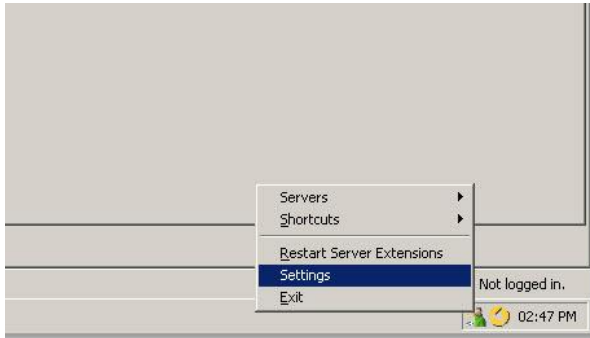
Once the installation process is finished, you can initiate Workflow Designer or Process Manager from Desktop shortcuts, or there are also Start Menu shortcuts for these tools and many others (Start / Programs / Altiris / Workflow Designer and Process Manager).



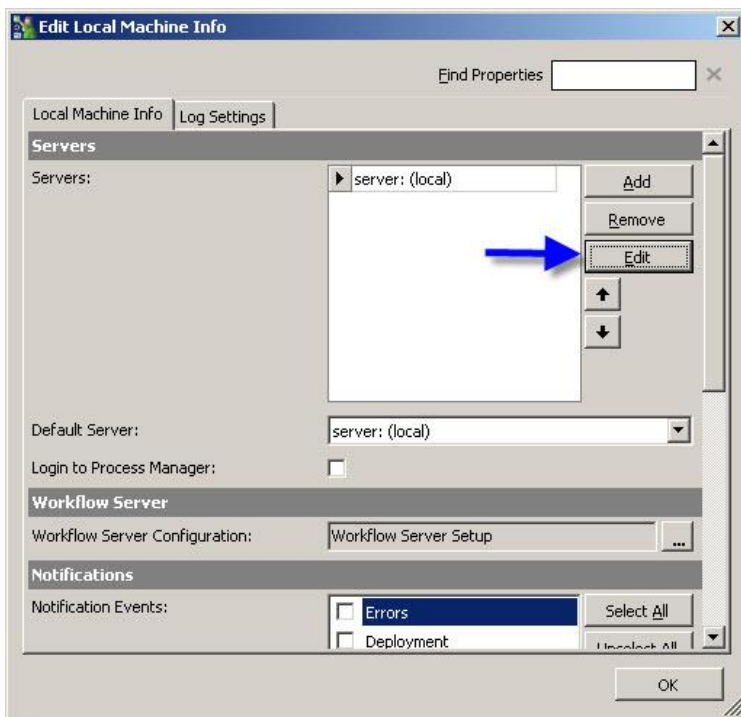
Open Workflow Designer. The first thing that Designer attempts to do is connect to Process Manager. It will try to do so with the default username admin@logicbase.com with a password of admin. If you changed the default username and password during the installation process, you will get this error message when Designer attempts to connect with Process Manager:



Click OK to bypass this error, then right-click on the Workflow task tray icon, and choose Settings.



Click on Edit to edit the appropriate server to supply the correct Process Manager username and password for Designer to connect to it.



In the Process Manager section, change the User ID and Password to match the User ID and Password that you specified during the Process Manager DB Setup. Click OK.

NOTE: Workflow does not validate the credentials that you've specified until the next time you open Workflow Designer. At that time it will attempt to connect to Process Manager again, and if it succeeds, Designer will say "Logged in as <username>" in the lower-right hand corner of the screen. If it again cannot connect, then you have most likely incorrectly typed in the credentials, and will need to repeat the above step to supply Workflow the correct username and password.

Edit Object

Find Properties

Server Details

Nick Name:

Group Name:

Ip Address:

Deployment Root URL:

Process Manager

Relative Path:

Port Number:

User ID:

Password:

Store Password: ☒

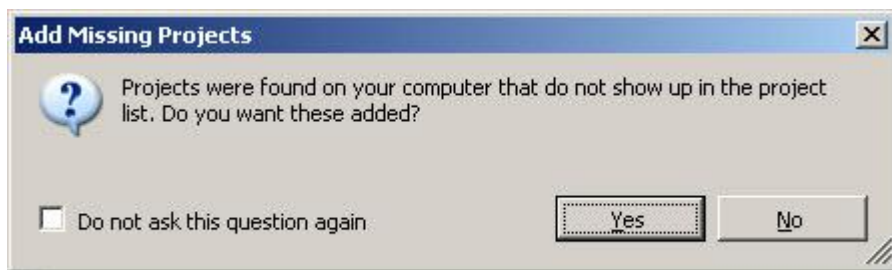
Use HTTPS: ☐

Server Extentions

Server Port Number:

OK

The other prompt you may see when you begin Workflow Designer is the Add Missing Projects prompt. This will occur any time there are Workflow projects on the machine that are not found in the Workflow project list. (When you first install the product, there are several integration projects which fit this description.) If you click Yes to this prompt, Workflow will add these projects to the Workflow project list so that you can easily access them in the future.



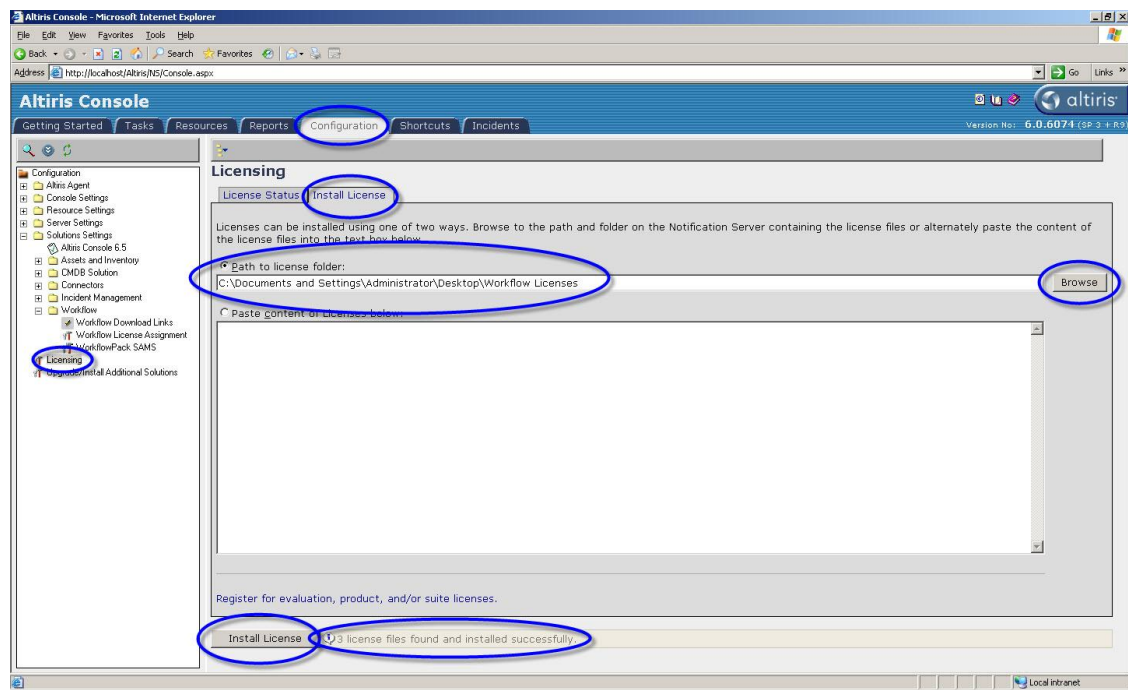
7. Any machine on which you will be designing workflows will require Workflow Designer. Workflows can be created and debugged locally on that machine without having a license for Designer. However, if you plan on publishing workflow projects to IIS, as opposed to just testing workflows in the local debugger, this will require Designer to be properly licensed. This is true even if you install all Workflow components on a single machine.

If Workflow Designer is not properly licensed, and you attempt to publish a workflow project, you will get the following error message:



If you need to add licenses for Workflow, this can be accomplished in Notification Server. Remember that the NS on which you add the licenses will need to be the same NS that you specified in the Notification Server Credentials Tool above.

- a. To start, open the Notification Server Console, and go to Configuration / Licensing.
- b. Click on the Install License tab. Each Workflow license will be in its own text file. Put all of the license files in a folder, e.g. in the screenshot, they are all located in %Desktop%\Workflow Licenses.
- c. Browse to that folder via the Browse button.
- d. Click Install License to import the licenses into NS.



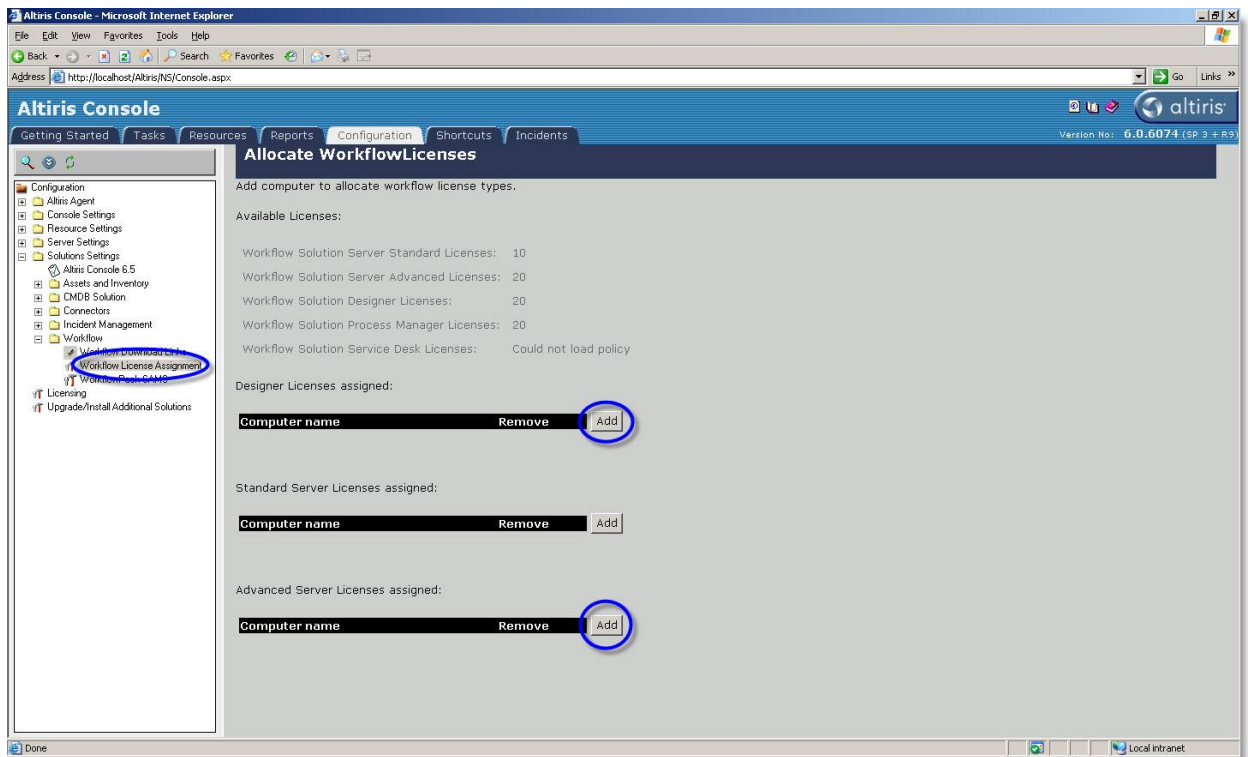
- e. On the License Status tab, click the Refresh button, and you should then see any licenses that you've added listed with a Status of OK. You will also see the expiration date of the licenses, which should be in the future (if the licenses are expired, Workflow is not considered licensed and you will receive the aforementioned error message when attempting to publish).

The screenshot shows the Altiris Console web interface in Microsoft Internet Explorer. The browser address bar shows `http://localhost/Altiris/NS/Console.aspx`. The Altiris Console header includes navigation tabs: Getting Started, Tasks, Resources, Reports, Configuration, Shortcuts, and Incidents. The left sidebar shows a tree view with categories like Configuration, Solutions Settings, Assets and Inventory, Incident Management, Workflow, and Licensing. The main content area is titled 'Licensing' and has two sub-tabs: 'License Status' (selected) and 'Install License'. Below the sub-tabs, a list of components is shown with a status of 'Ok' and 'No License Required'. A table titled 'Trial Licenses' is displayed with the following data:

Solution Name	Total	In Use	License Expires	Status
Workflow Solution Designer	20	0	3/26/2009	Ok
Asset Management Solution	5	0	3/26/2009	Ok
Workflow Solution Process Manager	20	0	3/26/2009	Ok
Altiris Connector Solution Data Integration Component	1	1	3/26/2009	Ok
Workflow Solution Server Advanced	20	0	3/26/2009	Ok
Helpdesk Solution	10	0	12/25/2008	Ok
CMDB Solution	5	0	12/25/2008	Ok
Workflow Solution Server Standard	10	0	12/25/2008	Ok

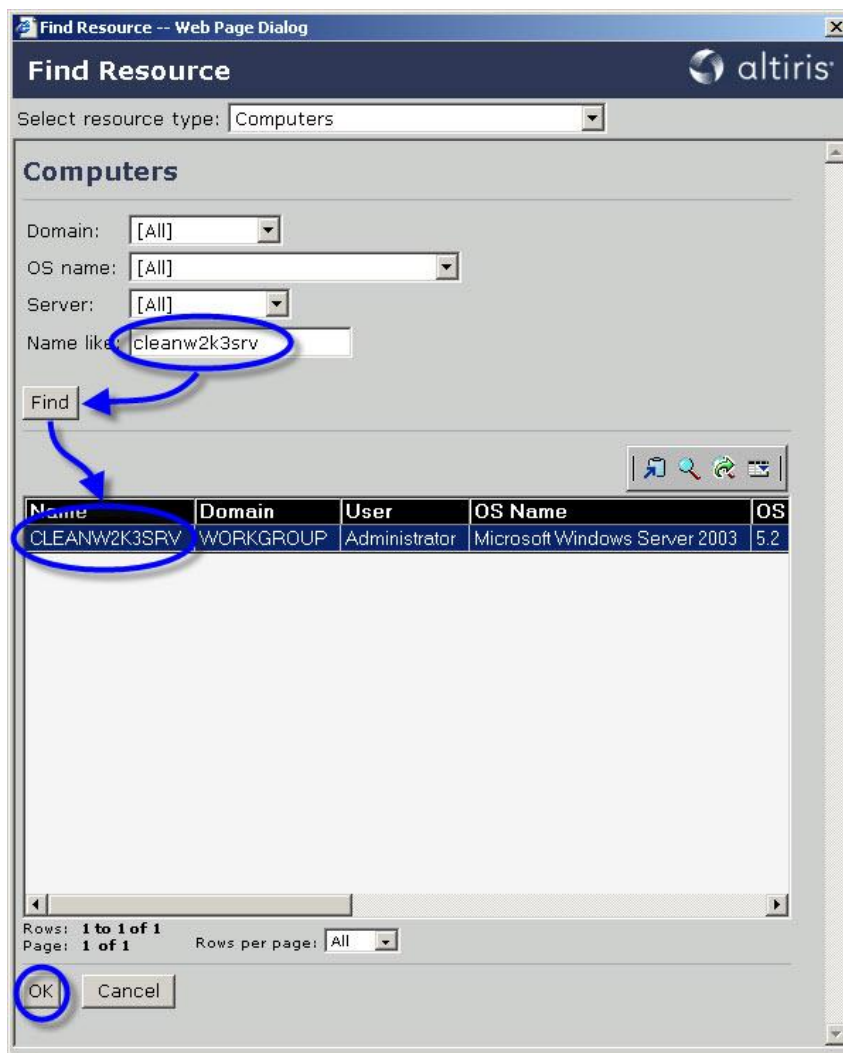
At the bottom of the Licensing section, there is a 'Refresh' button circled in blue. The browser status bar at the bottom shows 'Done' and 'Local intranet'.

- f. Now that the licenses have been imported into NS and are available for use, we need to assign them to the appropriate machine(s) where we have Workflow installed. Go to Configuration / Solutions Settings / Workflow / Workflow License Assignment.
- g. Click the Add button next to a license type to assign a license to a particular machine in your environment.

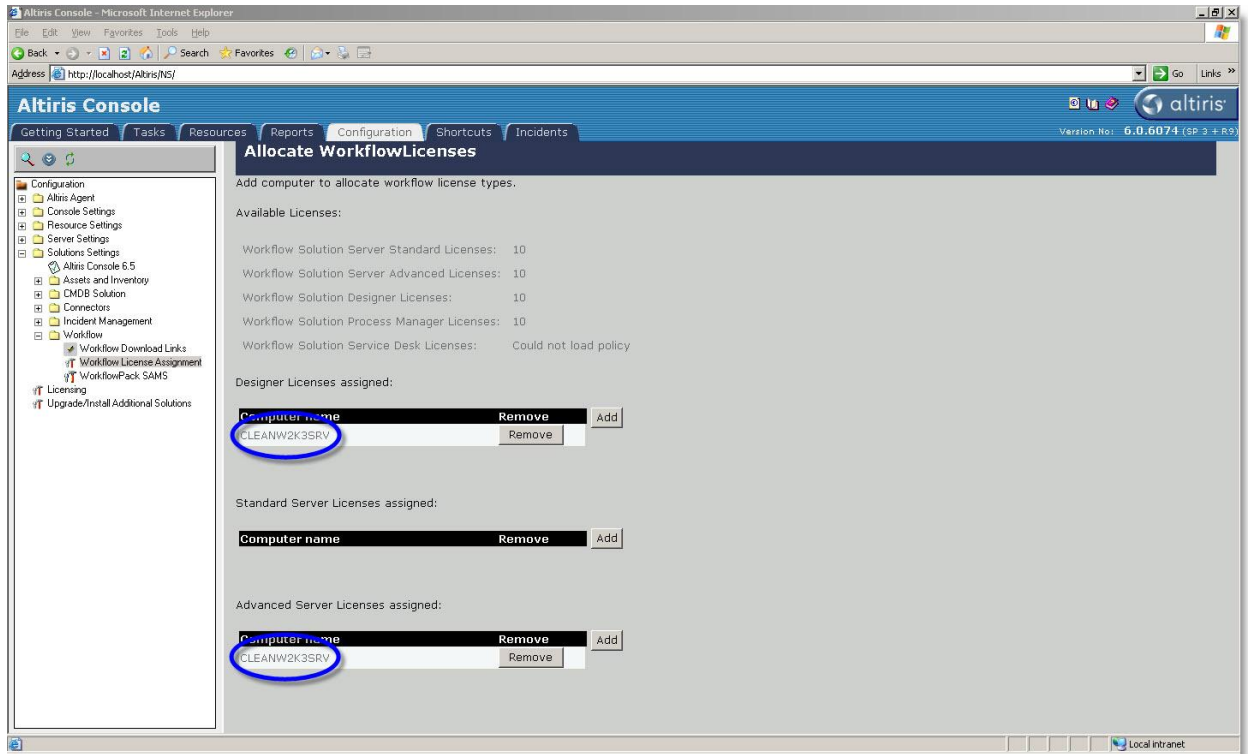


Remember that you must have the Altiris Agent installed and running on a machine to be able to assign a Workflow license to that machine. The Altiris Agent can be deployed from the Configuration tab, under the Altiris Agent / Altiris Agent Rollout node. For more detailed information on rolling out the Altiris Agent, refer to Chapter 3 in the Notification Server Reference manual (http://www.altiris.com/upload/notificationref_001.pdf) or this helpful article on Juice (<http://www.symantec.com/community/article/6745/altiris-agent-requirements-agent-installation>).

When you click Add, you can search for any machine that has the Altiris Agent installed and running, and assign a license to that machine. In the example screenshot below, I've typed in the machine name of the computer to which I want to assign a license (cleanw2k3srv). Then, click Find, and that machine will be displayed in the results section. Highlight that machine in the list and click OK. Repeat this process for any other licenses which need to be assigned.



You should now see the computer name(s) which have been assigned licenses on the Workflow License Assignment screen. This is your indication that these machines have now been properly licensed for that component of Workflow.



For further verification, if you look back at Configuration / Licensing, you should see that your Workflow licenses are listed as “In Use”.

Altiris Console - Microsoft Internet Explorer

Address: http://localhost/Altiris/NS/Console.aspx

Altiris Console

Getting Started | Tasks | Resources | Reports | Configuration | Shortcuts | Incidents

Version No: 6.0.6074 (SP 3 + R9)

Licensing

License Status | Install License

Altiris Data Connector 6.5 Update (KB41359)
 Altiris NS 6.0 SP3 Update (KB39160)
 Altiris Power Control Task
 Altiris Script Task
 Altiris Service Control Task
 Altiris Task Management
 Asset Management Report Pack
 Asset Management Solution Documentation
 CMDB Solution Documentation
 CMDBReport
 Context Factory
 Contract Management Product
 Helpdesk Solution Documentation
 Report Pack for Helpdesk Solution
 Report Pack for Task Server
 Resource Management
 Service
 Task Server Documentation

No License Required

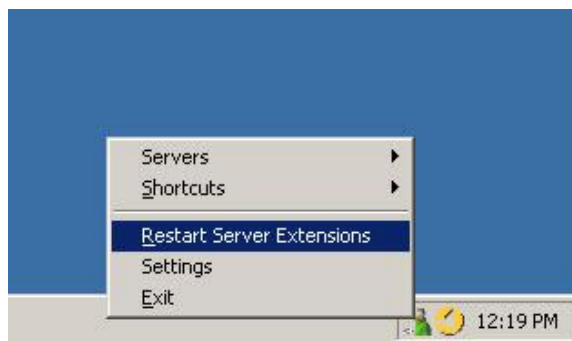
Ok

Trial Licenses

Solution Name	Total	In Use	License Expires	Status
Workflow Solution Designer	20	0	3/26/2009	OK
Asset Management Solution	5	0	12/25/2008	OK
Workflow Solution Process Manager	20	0	3/26/2009	OK
Altiris Connector Solution Data Integration Component	1	1	12/25/2008	OK
Workflow Solution Server Advanced	20	0	3/26/2009	OK
Helpdesk Solution	10	0	1/17/2009	OK
CMDB Solution	5	0	12/25/2008	OK
Workflow Solution Server Standard	10	0	12/25/2008	OK

Refresh

Once a license has been assigned, it may take awhile for Workflow to recognize this. If you want to accelerate the license refresh, right-click on the Workflow system tray icon and click Restart Server Extensions. This will stop and start all Workflow-related services, which forces Workflow to check back with Notification Server and refresh its license check.

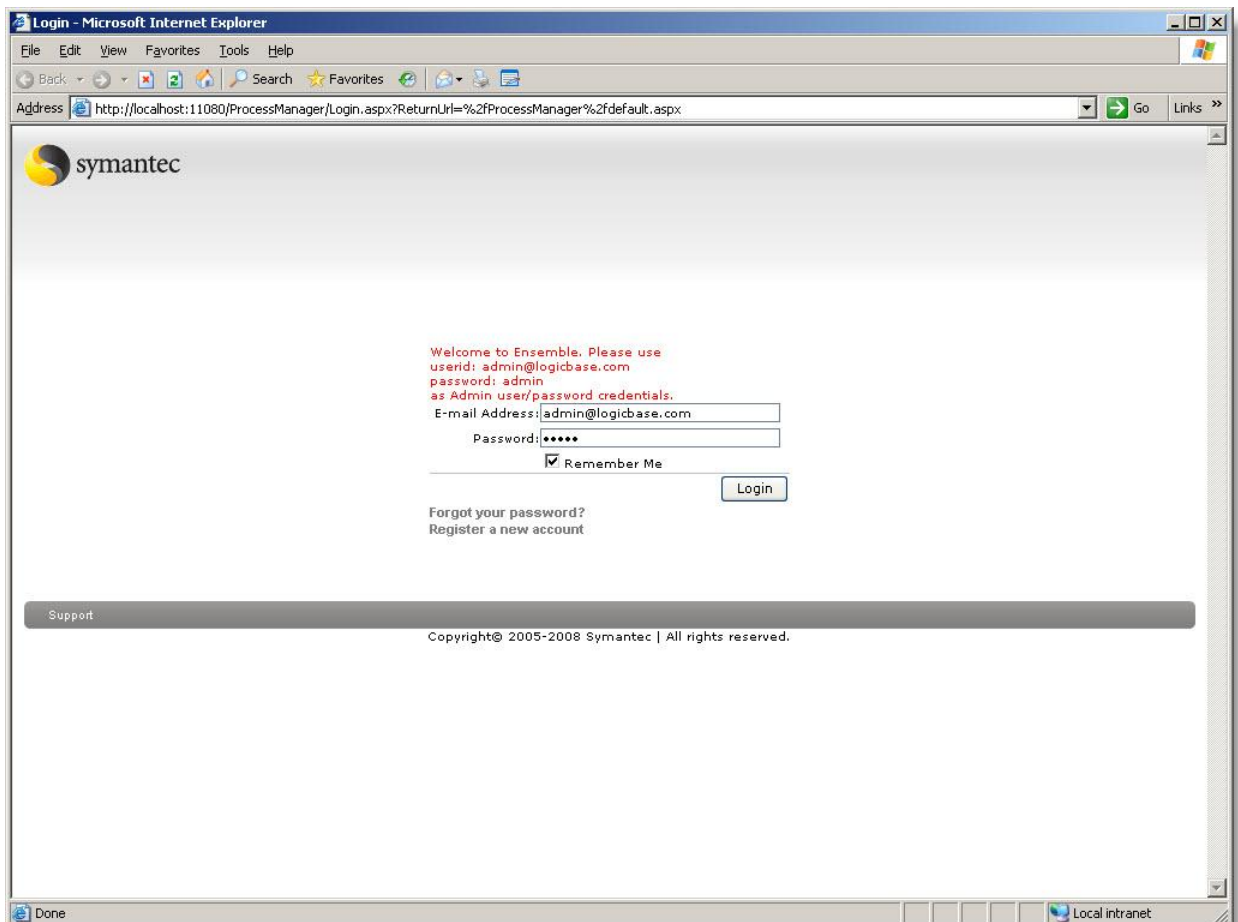


- 7) At this point, everything is installed for Workflow Server, Designer, and Process Manager. The remainder of the document will briefly discuss how to get logged in to and started with Process Manager.

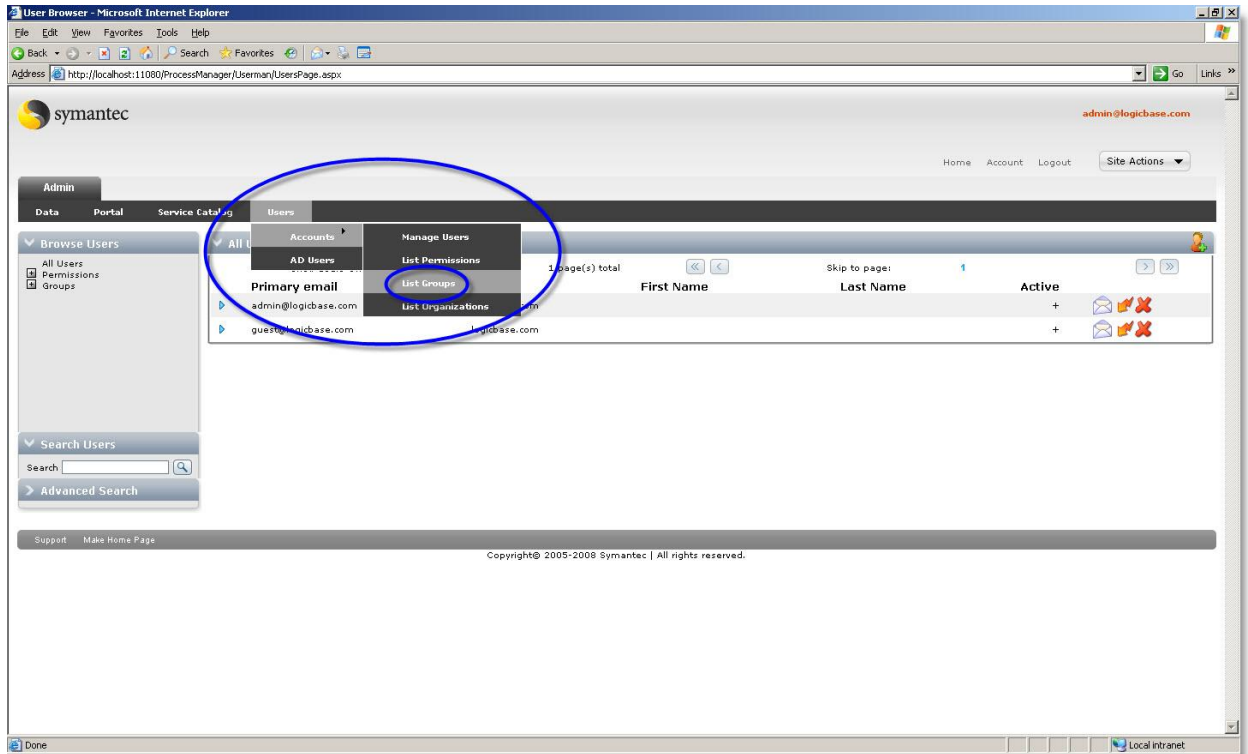
You should be able to access Process Manager via the Desktop or Start Menu shortcuts. You can also reach it directly from a browser at <http://<servername>:11080/ProcessManager>

NOTE: This assumes that you accepted the default virtual directory name during the Process Manager installation...if not, the last part of the address will match the changed virtual directory name.

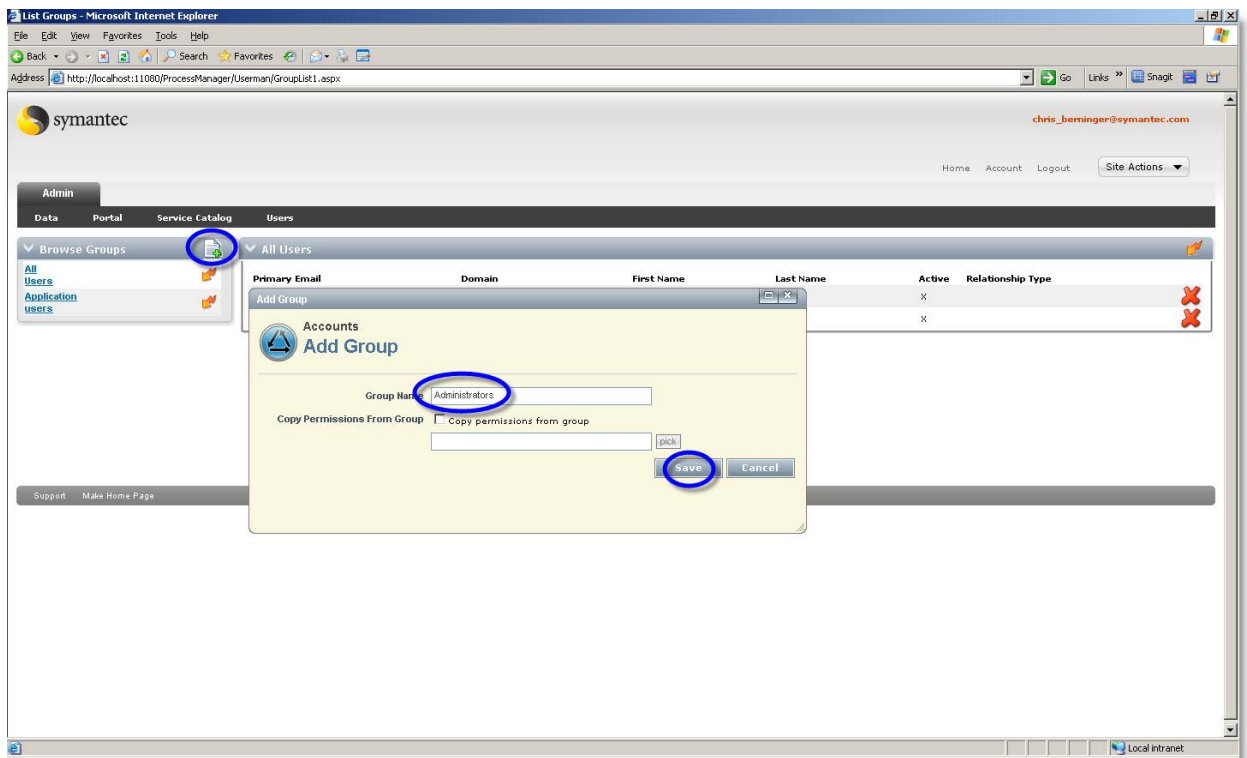
To log in to Process Manager, use the username and password that you specified on the Ensemble DB Setup dialog during the Process Manager installation. The default username is admin@logicbase.com with a password of admin.



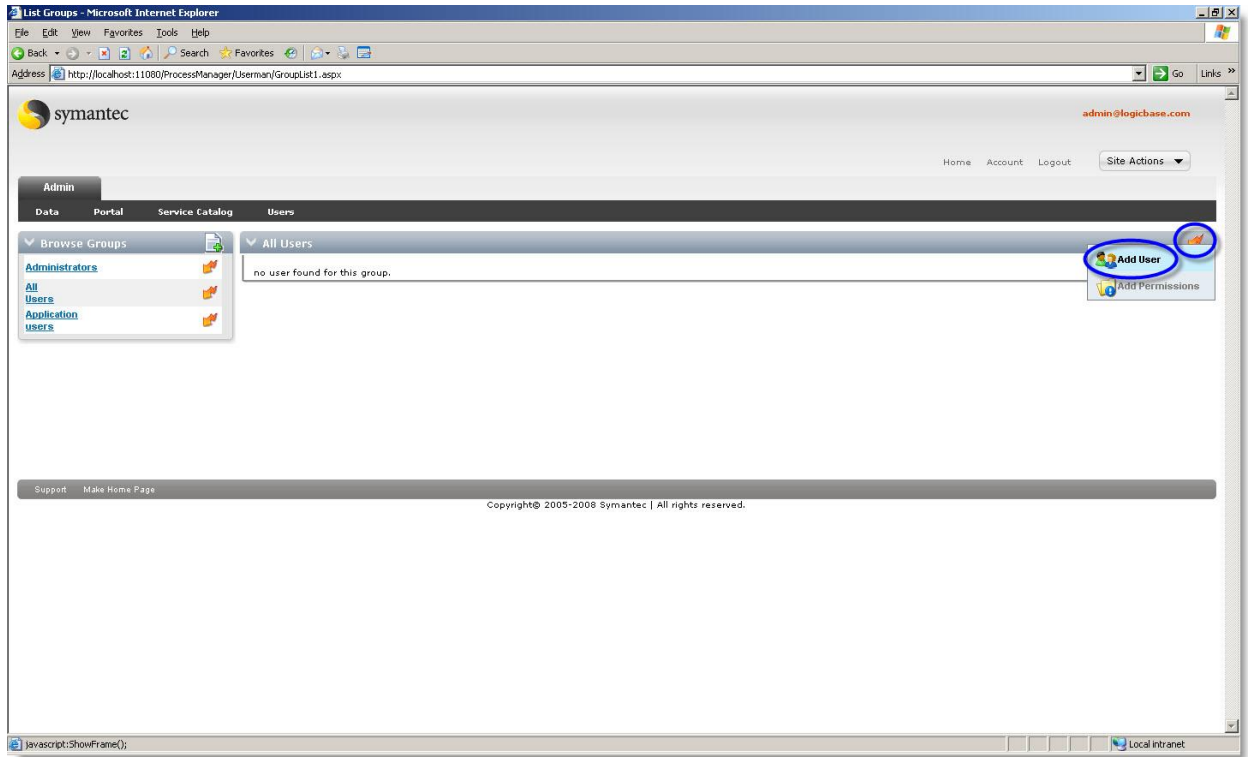
First, let's give our admin user the proper permissions in Process Manager. Highlight over Admin, and choose Users / Accounts / List Groups.



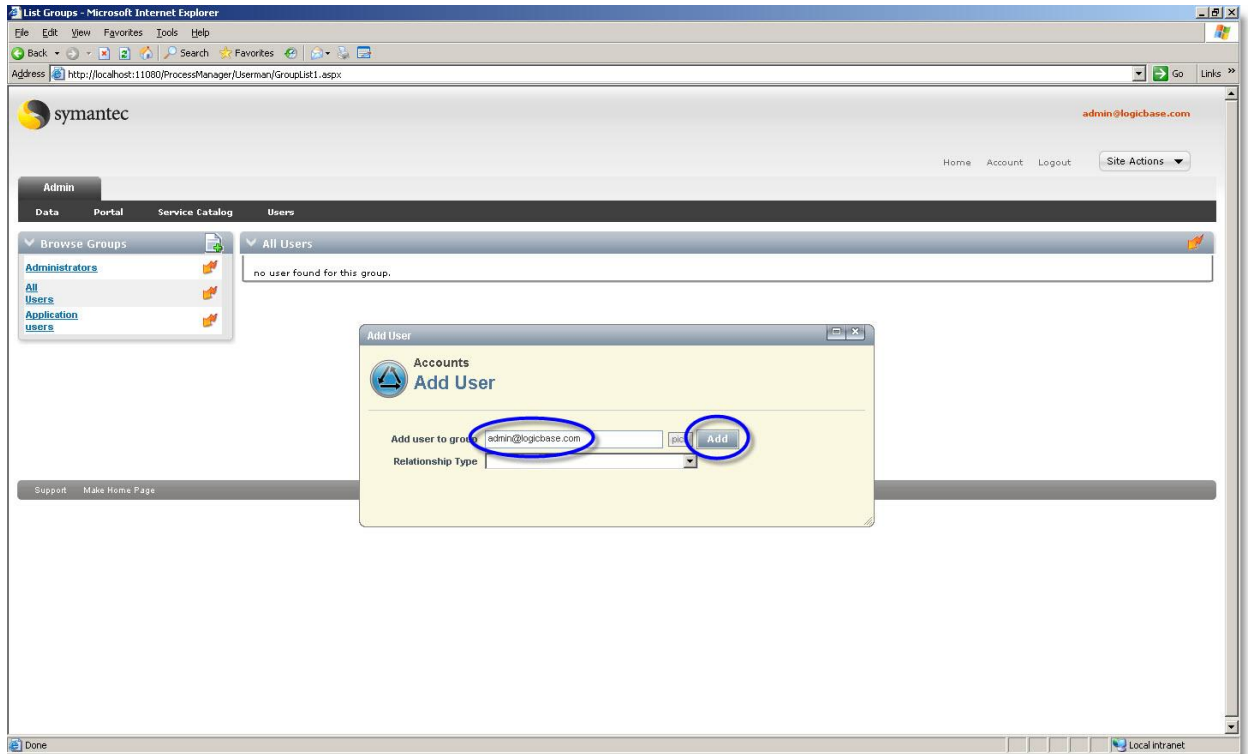
If there is not an Administrators group already (which will depend on whether or not you accepted the default username and password during the installation), we will want to add one. Click the page with the green plus-sign icon next to Browse Groups. Type in Administrators for the group name, and click Save. Administrators should show up in the list of groups on the left-hand side.



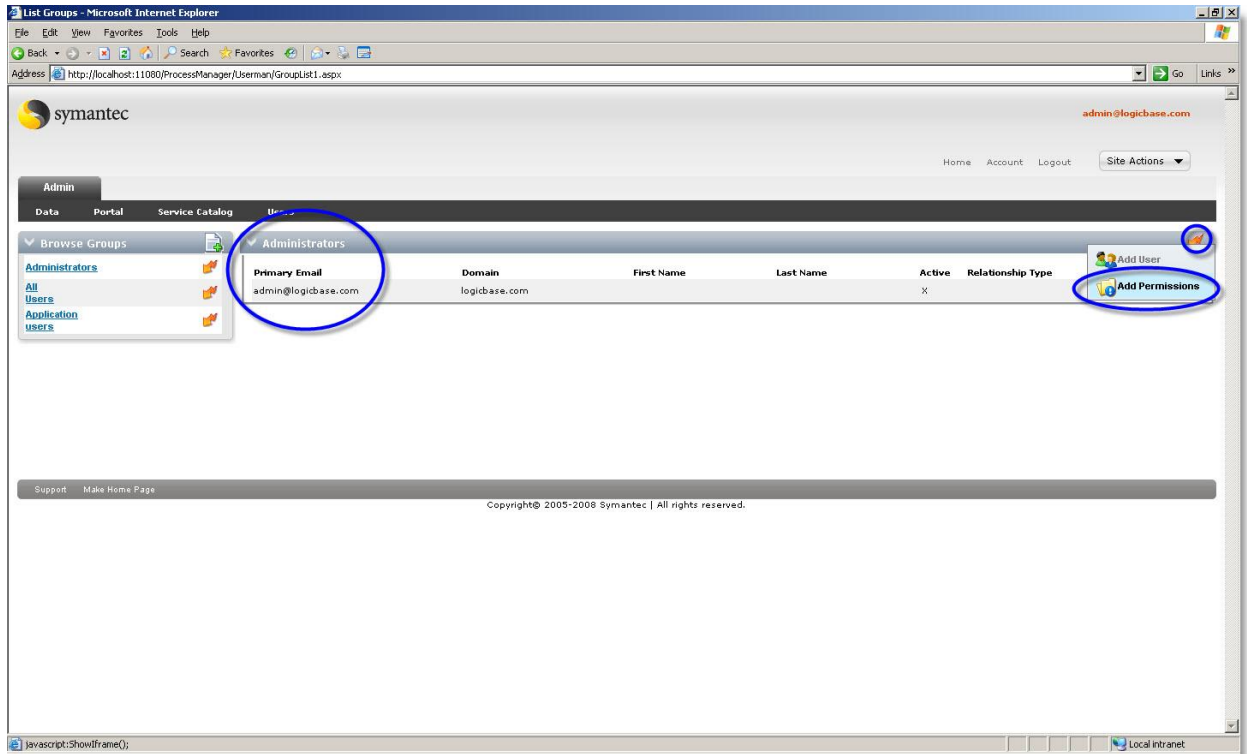
To add our default user to the Administrators group, click on Administrators on the left-hand side (to make sure we are adding a user to the proper group), and then click the orange lightning icon on the right-hand side and choose Add User.



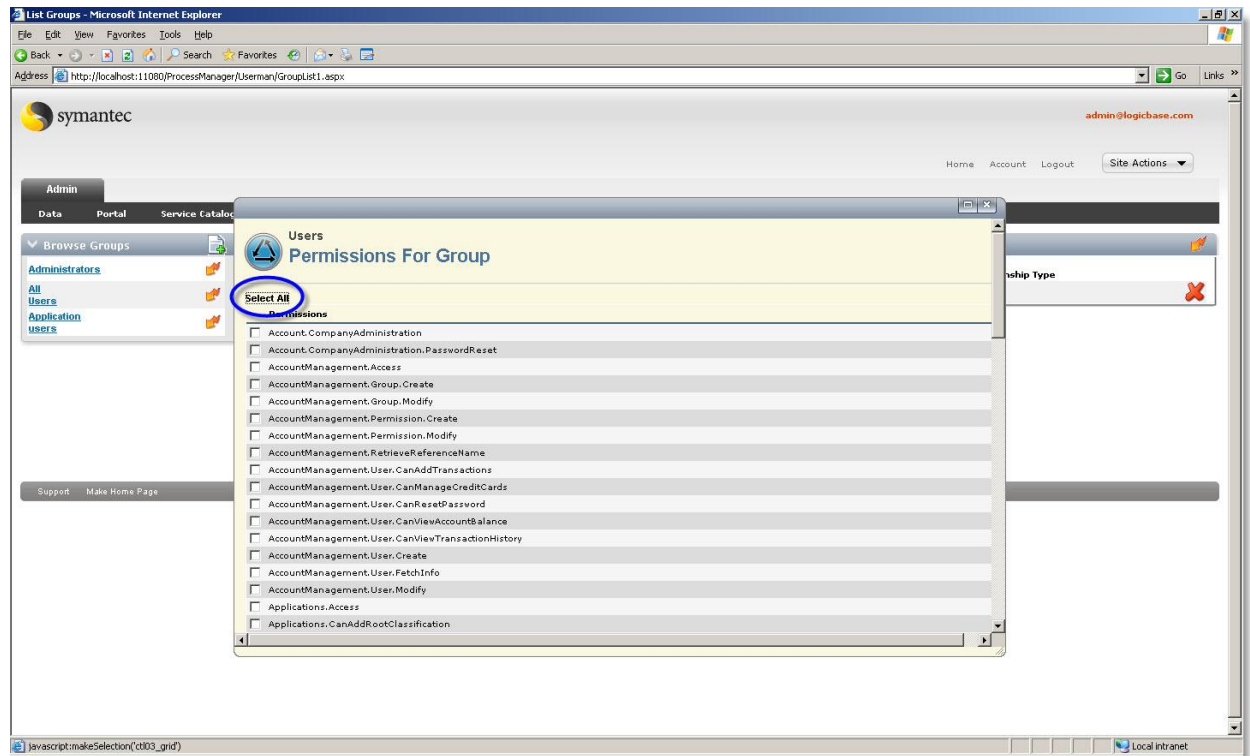
Type in the username (typically an email address, such as the one you logged in with) and click Add. Now this username should be a member of the Administrators group.



The last thing we need to do is give the Administrators group full permissions to operate within Process Manager (no permissions are granted by default when a new group is created). Again click on the orange lightning icon and click Add Permissions.



To grant the Administrators group full permissions, click Select All, then scroll down and click Save. Now the Administrators group has full permissions in Process Manager, and every member (including future members) of the Administrators group will inherit these permissions.



At this point, you should have Workflow Solution installed and ready for first-use. If you are a new user and are looking for tips, articles, and how-to's on building Workflow projects, a great place to start is Juice (<http://www.symantec.com/community/workflow>). It contains dozens of Workflow-related articles, videos, tips, tricks, etc., and more are added every week.

This guide was written by Chris Berninger, Symantec Systems Engineer (Workflow Solution Specialist). If you have any comments, areas of feedback, or suggestions for improving this document, please feel free to email chris_berninger@symantec.com.