ExpressCluster X SingleServerSafe for Windows

Quick Start Guide for Microsoft SQL Server

(Installation & Configuration Guide)

NEC ExpressCluster X SingleServerSafe (SSS) for Windows
Quick Start Guide to install and configure SSS with Microsoft SQL Server

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NEC Corporation

Installing ExpressCluster X SSS on Windows Server 2003

1. Install the ExpressCluster X SSS software
    - Insert ExpressCluster X SSS CD in CD-Drive. “NEC ExpressCluster Setup Menu” screen will be shown. In case it is not shown, open the ExpressCluster X SSS CD and click on “menu.exe”
    - Click “NEC ExpressCluster SingleServerSafe for Windows” option
    - Click “NEC ExpressCluster X SingleServerSafe for Windows” option
    - Click “Next”
    - Click “Next”
    - Click “Install”
    - Keep the default WebManager HTTP Port to 29003 and click “Next”
    - Click “Register”
    - Click “Register with License Information” if you have license key. You can also click “Register with License File” if you have softcopy file of license. For now we are assuming softcopy of license key, so will click “Register with License File”.
    - Browse to the folder where license file is kept. Select the license file and click “Open”.
    - On successful registration of license, a window with message “The license was registered.” will be shown.
    - Click “OK”
    - Click “Finish”
    - Restart the server.
2. Install the JRE (Java runtime)
    - Get the JRE and install it.

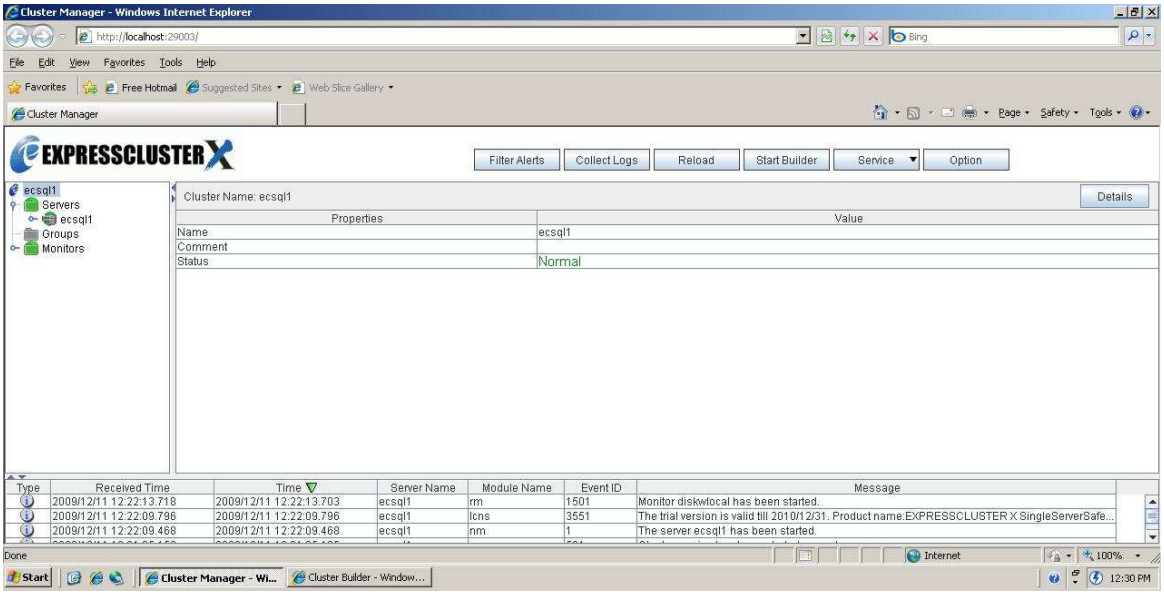
Configuring ExpressCluster X SSS for MS SQL Server

Prerequisite – Before configuring ExpressCluster X SSS, MS SQL Server must be installed on server on which SSS is installed.

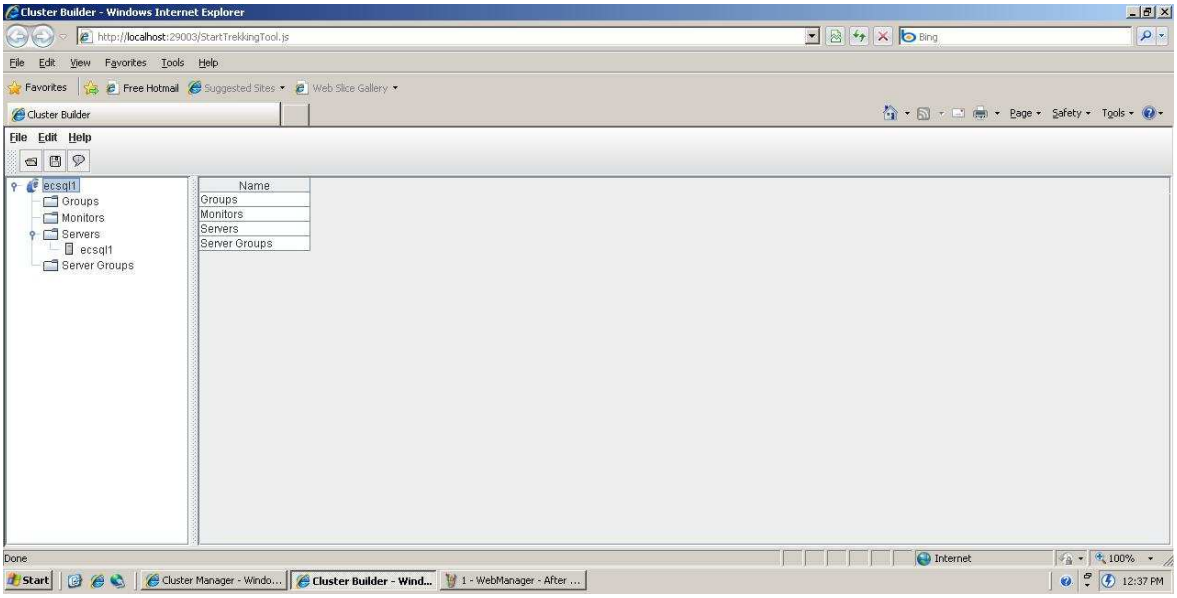
For details on how to start the web manager & definitions of features available in SSS, refer the ExpressCluster X SSS manuals. Given below is a brief demonstration on how to configure SSS using sample service application. Application being used for preparation of this document is MS SQL Server 2005

Step 1: Open SSS WebManager by opening link “http://localhost:29003” in browser of server on

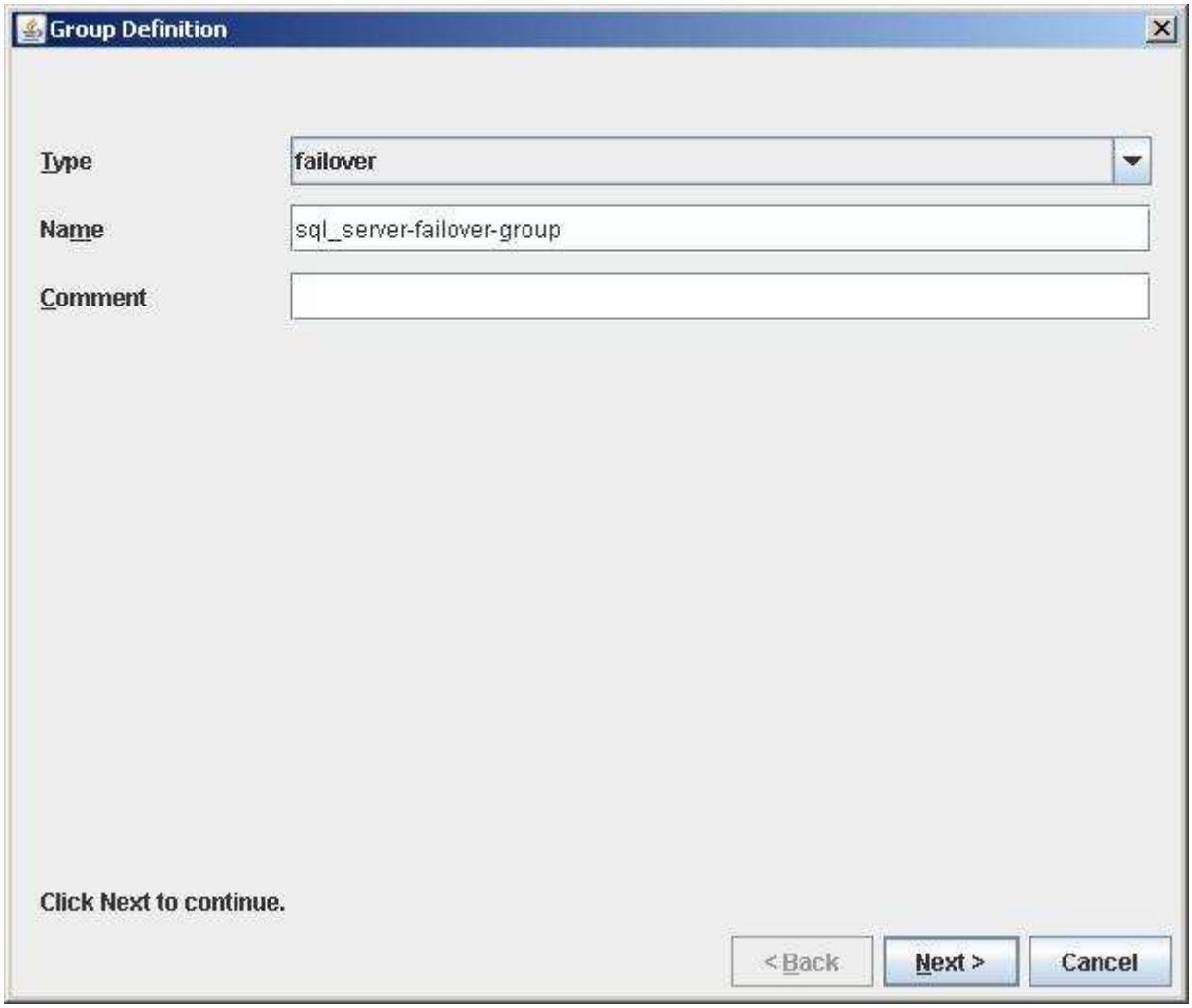
which SSS is installed. You will see the default cluster already created as shown in below image. In below image “ecsql1” is the hostname of server. You will see the hostname of your SSS server here.



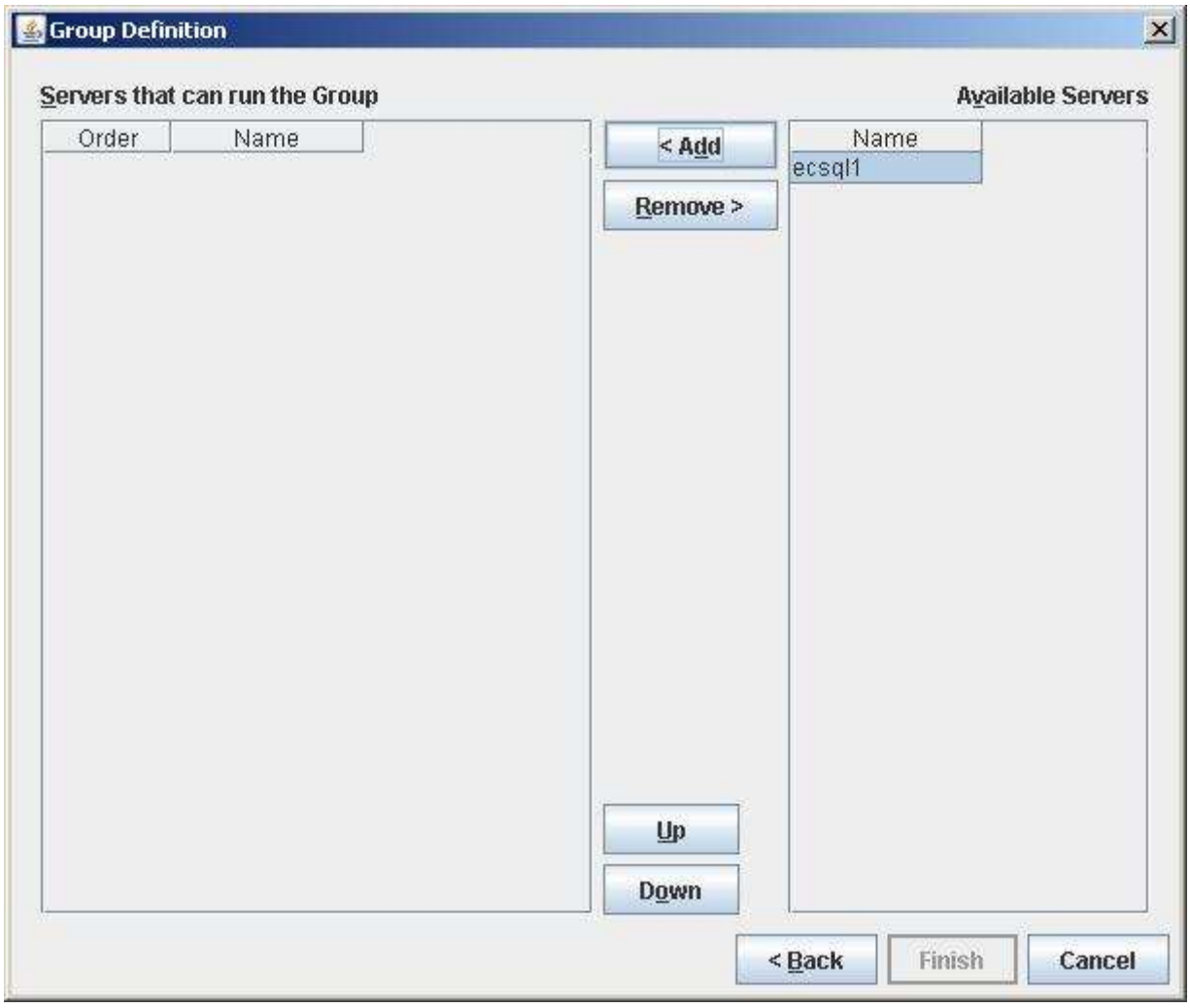
Step 2: Click “Start Builder” to open the cluster builder window. Within this window we can alter/customize the SSS configuration. Cluster window will look like as shown in below image. In below image “ecsql1” is the hostname of server. You will see the hostname of your SSS server here.



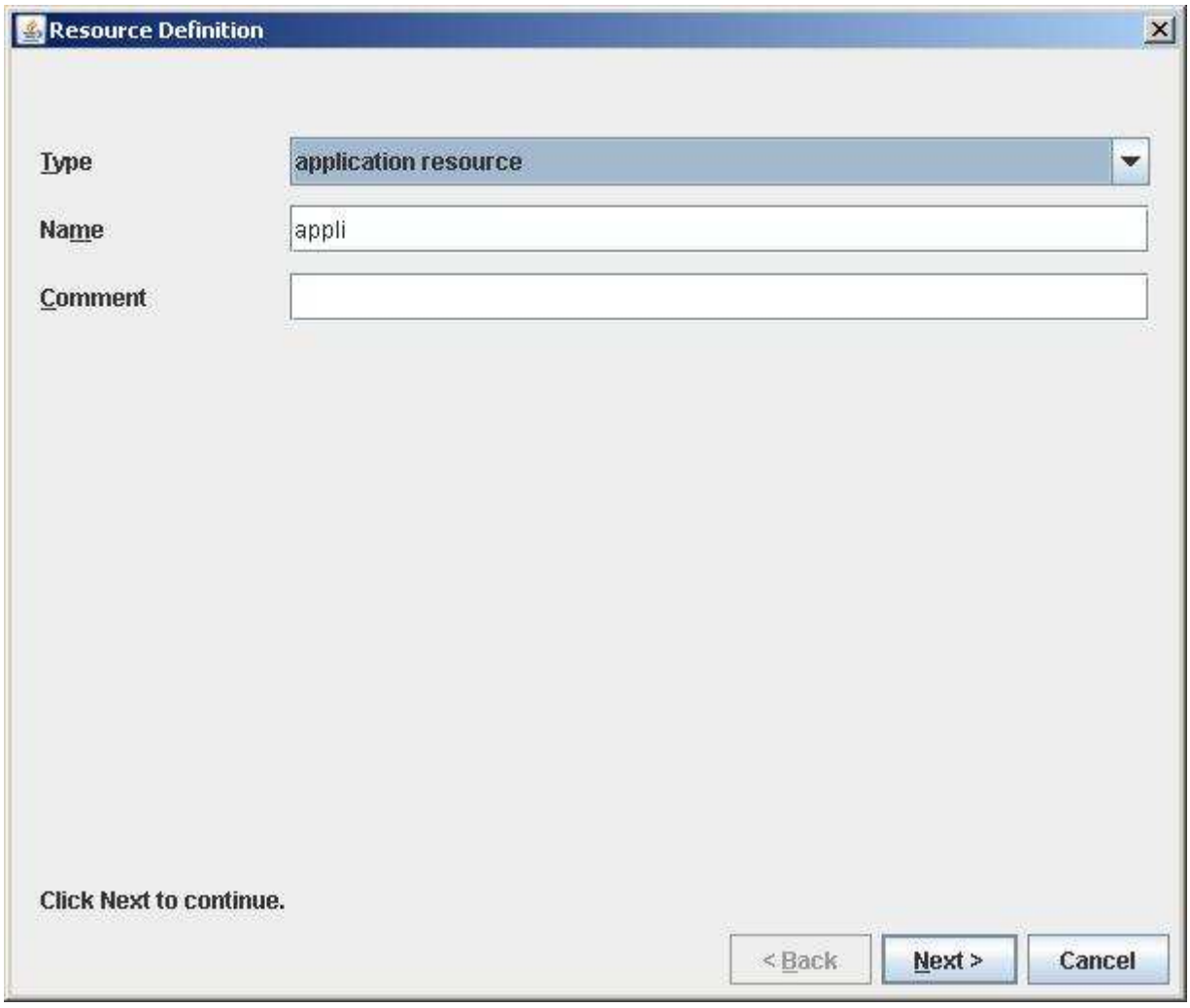
Step 3: Right click “Groups”. Click “Add Group”. A wizard will open to create a group as shown in below image. Enter the name of group. Let’s name it “sql_server-failover-group”.



Step 4: Click “Add” to add the server ecsql1 on which this failover group will run. Click “Finish”. On completion, a group “sql_server-failover-group” will be added under “failover”.



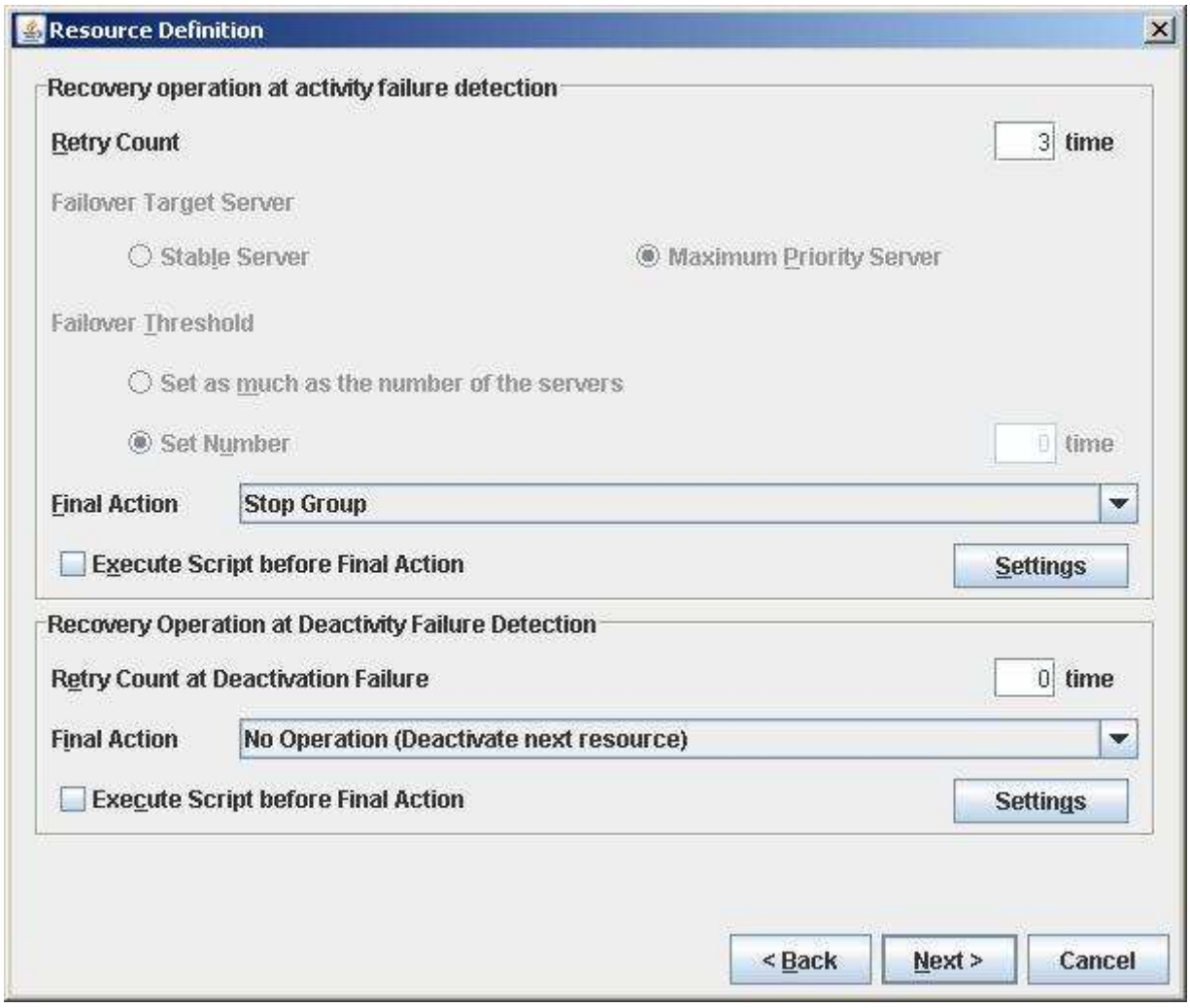
Step 5: Right click “sql_server-failover-group”. Click “Add Resource”. Window to add resource will be displayed as shown in below window.



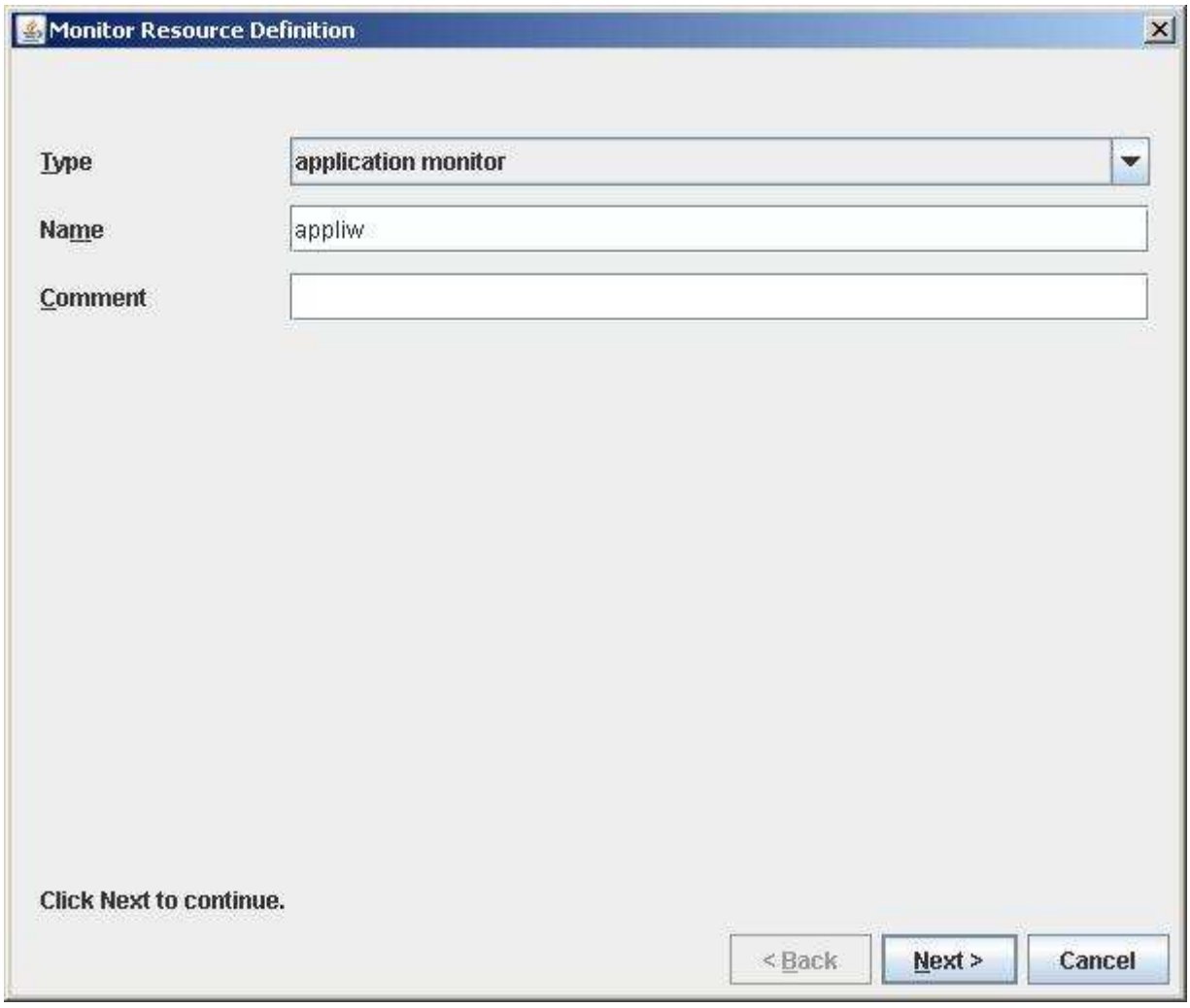
Step 6: In “Type” field select “service resource”. In “Name” filed, let’s name this resource as “sql_server-service”. Click “Next”.

Step 7: In “Service Name” field enter “MSSQLSERVER”. Click “Next”.

Step 8: In this window, do the setting as shown in below image. Set “Retry Count” to “3”. Set “Final Action” for “Recovery Operation at activity failure detection” to “Stop Group”. Set the “Final Action” for “Recovery Operation at Deactivity Failure Detection” to “No Operation (Deactivate Next Resource)”. Click “Next” and then click “Finish” in next window. On completion, a service resource will be added with name “sql_server-service”.

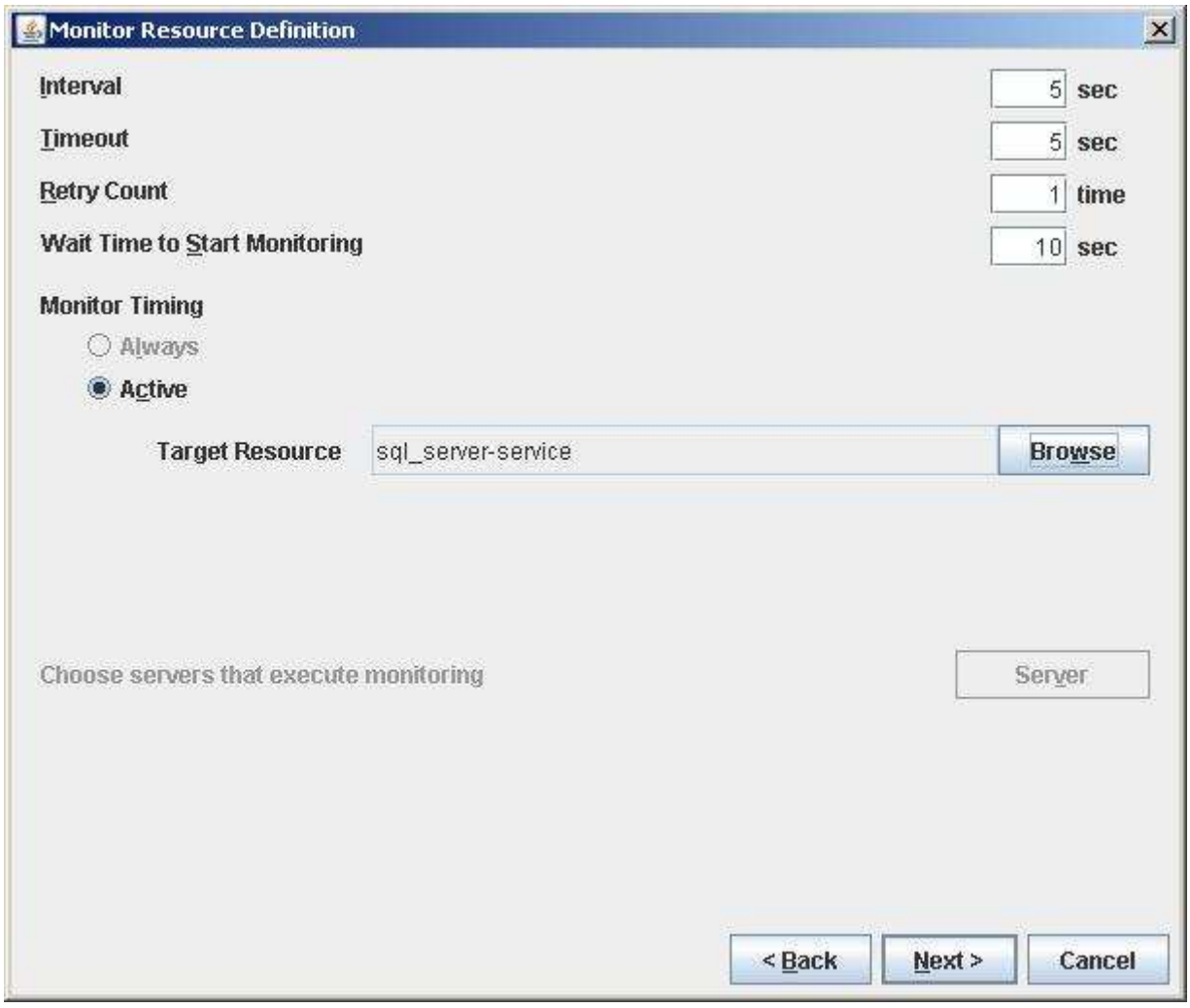


Step 9: Now let's add monitor which can detect MS SQL Server failure or hung-up situation. Right click "Monitors". Click "Add Monitor Resource". Window to add monitor resource will be displayed as shown below.

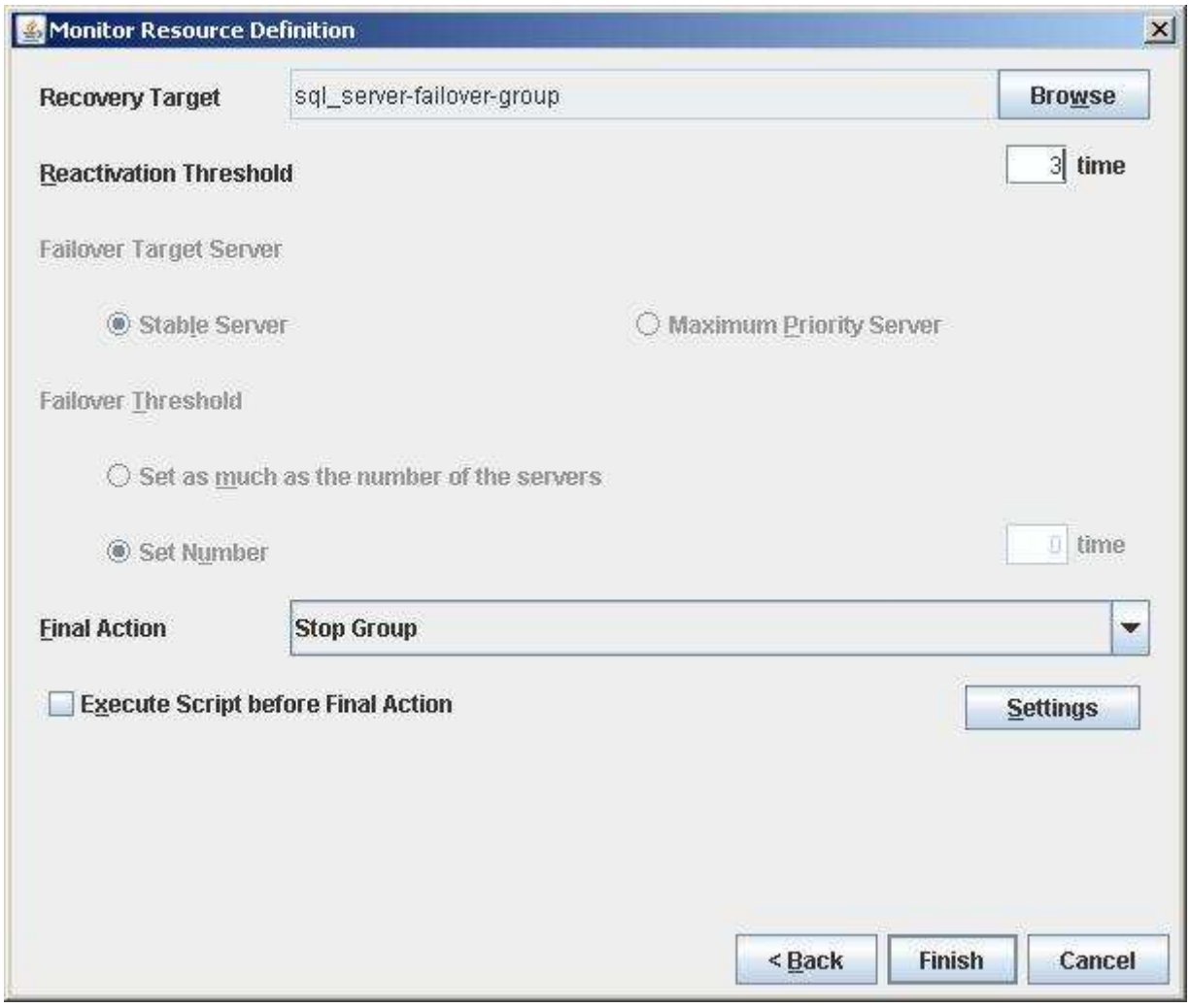


Step 10: In “Type” field, select “service monitor”. In “Name” field, let’s enter “sql_server-monitor” as name of monitor. Click “Next”.

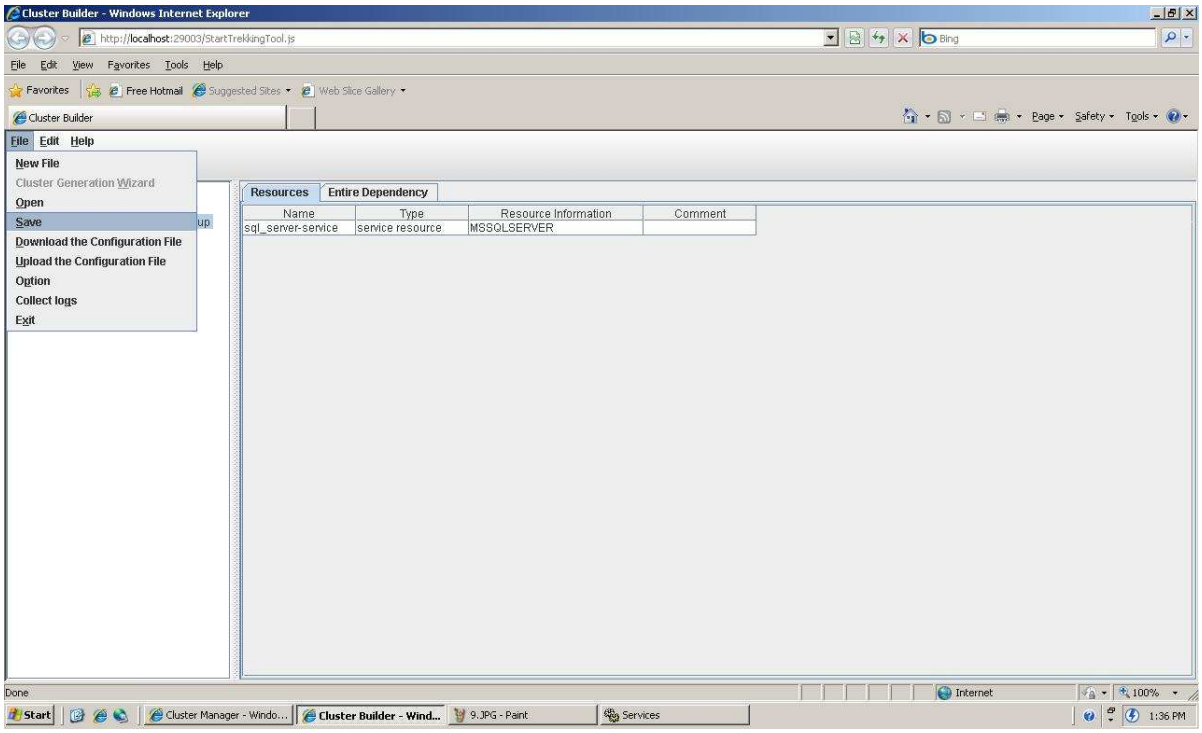
Step 11: In this window, set the parameters as shown in below image. Click “Next”.



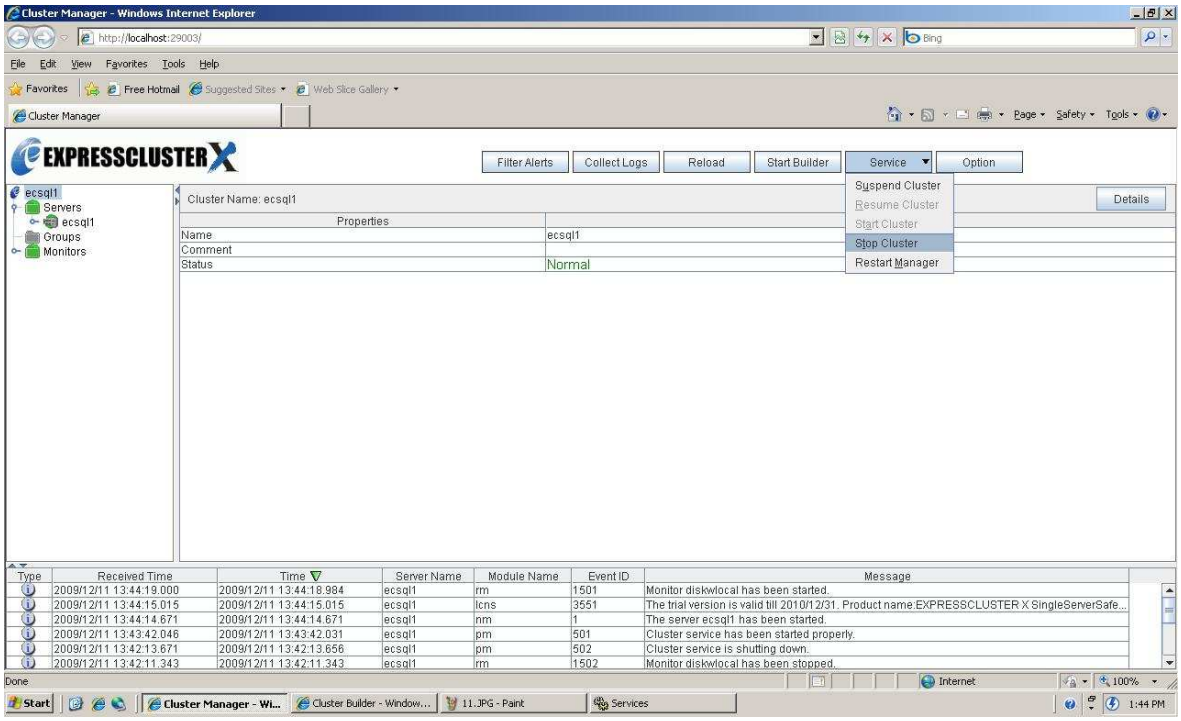
Step 12: In this window, set the parameters as shown in below image. Click “Finish”.



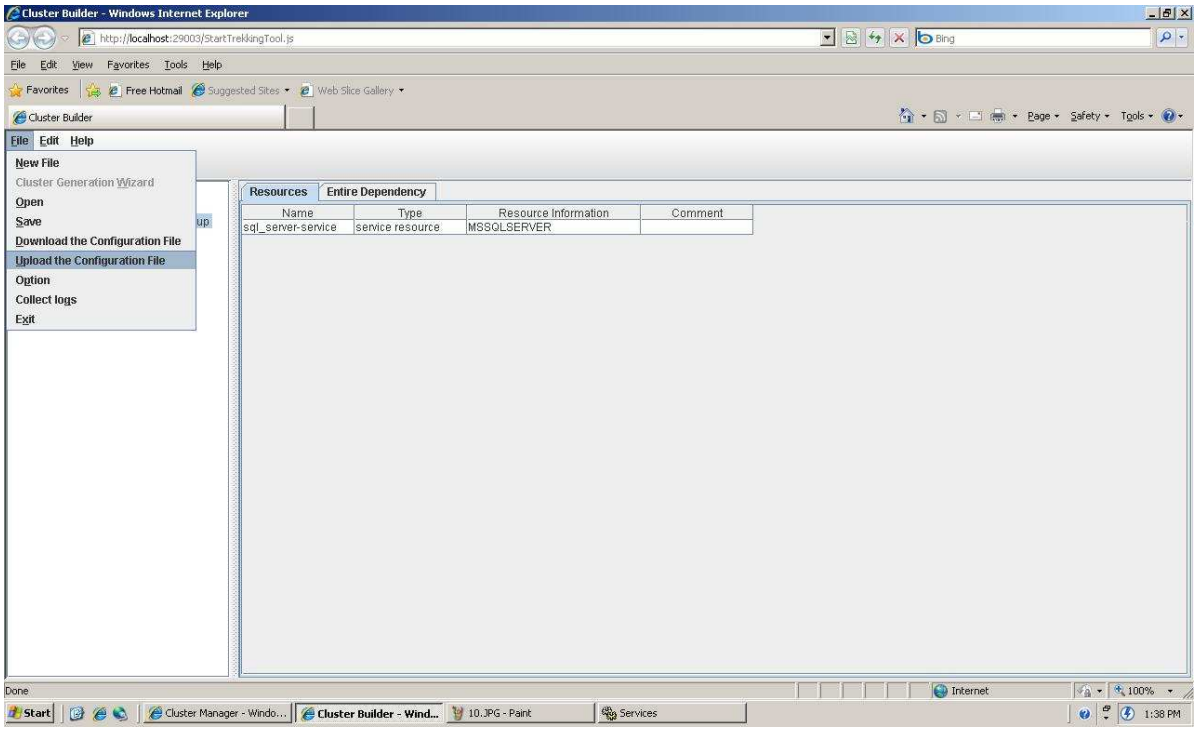
Step 13: Now cluster is built, we just need to save the configuration and then upload it. To save the configuration on disk, click “File” menu and then click “Save”, as shown in below image.



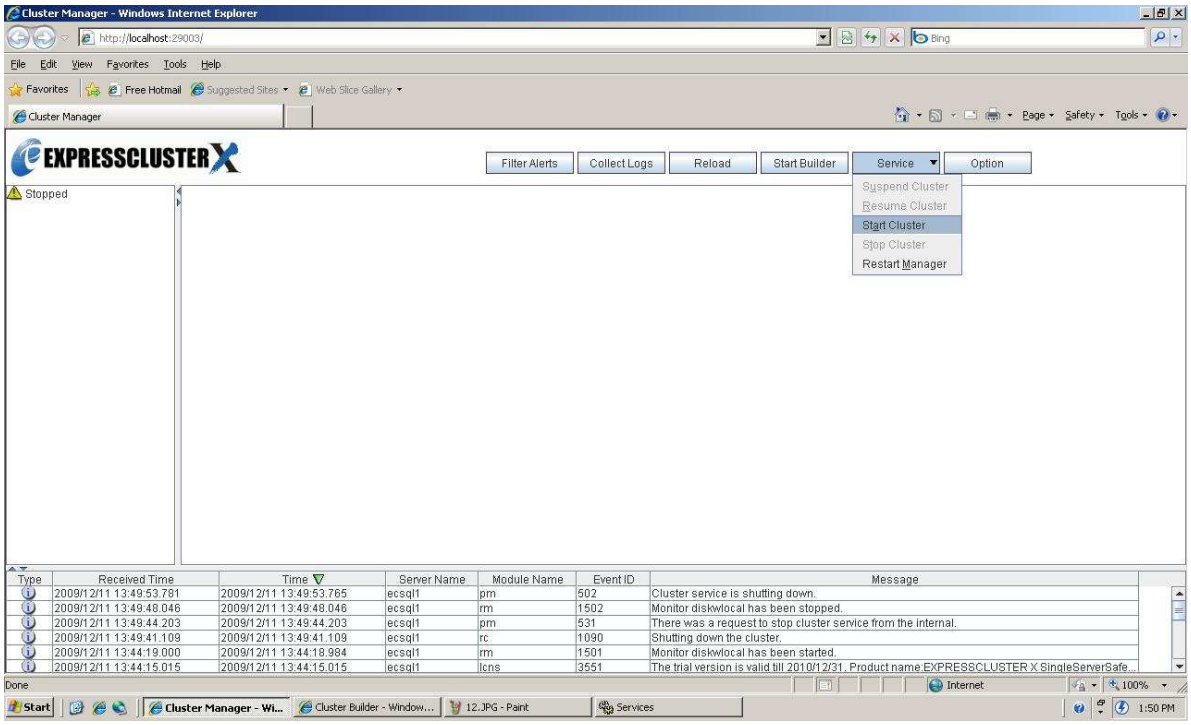
Step 14: Before uploading the configuration, stop the cluster as shown in below image. To stop the cluster, go to WebManager window. Click “Service” button and then click “Stop Cluster”. Once cluster is stopped, an information message will be displayed.



Step 15: To upload the configuration and bring the configuration to effect, click “File” menu and then click “Upload the Configuration File”, as shown in below image. On successful upload, a window with success message will be shown.



Step 16: To start the cluster, go to Cluster WebManger window. Click “Service” button and then click “Start Cluster”, as shown in below image.


Cluster Manager - Windows Internet Explorer
http://localhost:29003/
File Edit View Favorites Tools Help
Favorites Free Hotmail Suggested Sites Web Slice Gallery
Cluster Manager
EXPRESSCLUSTER X
Filter Alerts
Collect Logs
Reload
Start Builder
Service
Option
Stopped
Suspend Cluster
Resume Cluster
Start Cluster
Stop Cluster
Restart Manager
Type Received Time Time Server Name Module Name Event ID Message
2009/12/11 13:49:53.781 2009/12/11 13:49:53.765 ecsql1 pm 502 Cluster service is shutting down.
2009/12/11 13:49:48.046 2009/12/11 13:49:48.046 ecsql1 rm 1502 Monitor diskwlocal has been stopped.
2009/12/11 13:49:44.203 2009/12/11 13:49:44.203 ecsql1 pm 531 There was a request to stop cluster service from the internal.
2009/12/11 13:49:41.109 2009/12/11 13:49:41.109 ecsql1 rc 1090 Shutting down the cluster.
2009/12/11 13:44:19.000 2009/12/11 13:44:18.984 ecsql1 rm 1501 Monitor diskwlocal has been started.
2009/12/11 13:44:15.015 2009/12/11 13:44:15.015 ecsql1 lcns 3551 The trial version is valid till 2010/12/31. Product name:EXPRESSCLUSTER X SingleServerSafe...
Done
Internet
100%
Start
Cluster Manager - Wi...
Cluster Builder - Window...
12.JPG - Paint
Services
1:50 PM