IBM® WebSphere® Application Server V7

Flexible management examples

This presentation gives a very high level explanation of some of the operations that a user might want to perform in a flexible management environment.

Agenda

- Administering a managed node
- Submitting a scripting job

While there are many different types of flexible management operations, this presentation explores just two examples from a very high level. In the first example, you look at administering a managed node from the administrative console of the administrative agent. In the second example, you look at two approaches, using the administrative console of the job manager and using wsadmin, to submit a scripting job from the job manager to a managed node.

Section

Administering a managed node

This example examines how to administer a managed node from the administrative console of the administrative agent.

Administering a managed node

- Use the administrative agent console to perform administrative tasks on the administrative agent or on a managed node

- Launch the administrative agent console by entering a URL like this in your browser:
  - http://<host_name>:<WC_adminhost port>/ibm/console

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In this example, you can see what needs to be done to administer an administrative agent or a base node that is registered through that administrative agent. When a base node is registered, much of the administrative code, including the administrative console code, in the associated application servers is subsumed by the administrative agent. This results in smaller footprint for the application servers and faster startup time.

The administrative console code runs in the administrative agent and is accessed in the same way as the administrative console in distributed systems. The URL to use is shown above.

The administrative agent console

When this URL is entered, the first choice you will have is to choose which node to administer. You can choose the administrative agent or any of the base nodes registered to that administrative agent. Since each node might have its own username and password, the prompt for these will not appear until after you have chosen the node that you want to administer. Once you have chosen the node and entered the username and password, you can use the console in the same way that it is used in distributed systems as in WebSphere Application Server Version 6.1.

Section

Submitting a scripting job

This example examines how to submit a scripting job from the job manager to a managed node.

Submitting a scripting job

- Can be done using console or with a wsadmin script

- Submit a scripting job when you need more control than is available from high level flexible management jobs

  - Example: Application deployment on normal server gives many more configuration choices than when deploying from job manager

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One type of job that the job manager might queue to a base server is submitting a script for the base server to run. This can be done using the job manager administrative console or wsadmin.

Typically, scripting jobs are submitted when finer control is needed than is available when a higher level job is submitted from the job manager. For example, application deployment can be done from the job manager, but you will not have the same level of control that you have when you perform application deployment from a network deployment environment.

To allow the same level of control, you can submit a scripting job to the base server to do the application deployment. In this case, you have the maximum control possible.

Process to submit a scripting job

- Distribute the script file from the job manager to the node where the script file will get run

- Run the script by submitting a runWsadminScript job from the job manager

- Can be used for Jython or Jacl scripts

From a high level, there are really only two steps involved to invoke a wsadmin script to run on the base server to do application deployment. The first step distributes the script file from the job manager to the node where the script is to be run. The second step requests the remote node to run the script using wsadmin.

Submitting a scripting job from the console
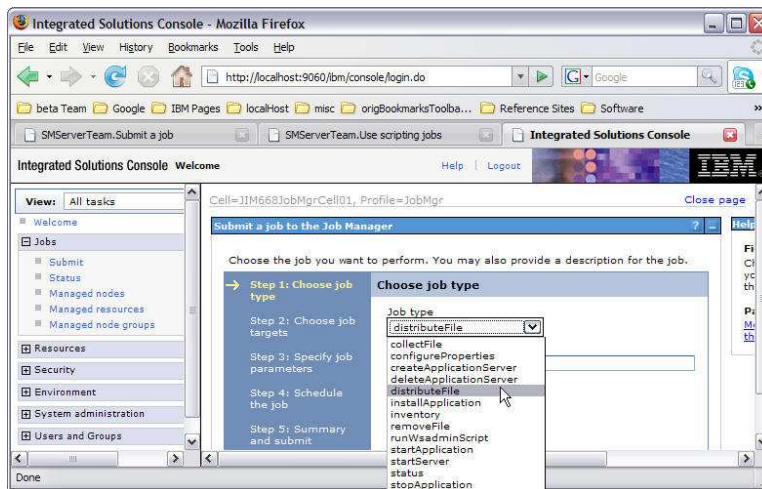
This slide shows the panel displayed by the job manager administrative console for choosing the "Job type". In this case, you choose "distributeFile" to transfer the script file from the job manager to the target node. Subsequent steps will let you choose targets, schedule the job for a particular time, and set other parameters.

Submitting a scripting job from the console
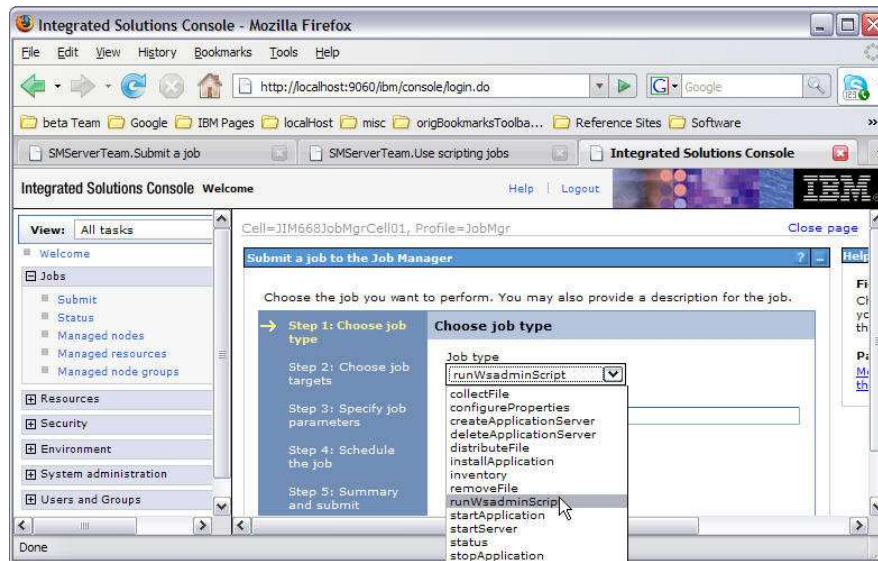
After the script file has been transferred to the target node, you must cause it to be run. This slide shows the panel displayed by the job manager administrative console for choosing the "Job type". In this case, you choose "runWsadminScript" to cause the script file to be run on the target node.

Submitting a scripting job from wsadmin

- Transfer the script file from the job manager to the target node:

  - ```
    AdminTask.submitJob('[-jobType distributeFile -targetList
    [target node name ] -jobParams "[ [destination
    jythonTestScript.py] [source file:/jythonTestScript.py] ]"]')
    ```

- Verify that the job succeeded, and the file was moved into the downloadedContent folder of the target node

- Run the script by submitting a runWsadminScript job as follows:

  - ```
    AdminTask.submitJob('[-jobType runWsadminScript -targetList
    [target node name ] -jobParams "[ [scriptLanguage jython]
    [scriptFileLocation jythonTestScript.py] ]"]')
    ```

- Note: Jacl scripts can be run by changing the value of the scriptLanguage parameter to jacl

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The previous slides showed how to use the job manager administrative console to transfer the script file and then cause it to be run on the target node. For many situations, it might be more convenient to bypass the console and use wsadmin, running on the job manager, to perform the sequence. This screen shows some of the Jython commands that can be used from wsadmin to do the same thing that you did with the console.

Section

Summary

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The next section contains a summary of the flexible management examples in this presentation.

Summary

- A managed node can be administered from the administrative agent console

- Scripting jobs can be submitted from the job manager console or with wsadmin

In this presentation you have seen a very high level examination of two tasks that an administrator of a flexible management environment might need to perform. In the first example, you were introduced to the administrative console of the administrative agent.

In the second example you looked at submitting a scripting job from a job manager to a managed node. You saw that this actually involved two high level steps, distributing the script file and then causing the managed node to run the script. You had a very brief introduction to the administrative console of the job manager and saw that the same results can be effected using wsadmin running on the job manager.

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