



IBM Software Group

# Managing IBM Express Runtime

**IBM Virtual Innovation Center**



IBM Express Runtime

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## Objectives

- **The objectives of this module are to:**
  - Explain the architecture of Console for Express Runtime
  - Demonstrate how to manage Express Runtime middleware using Console for Express Runtime

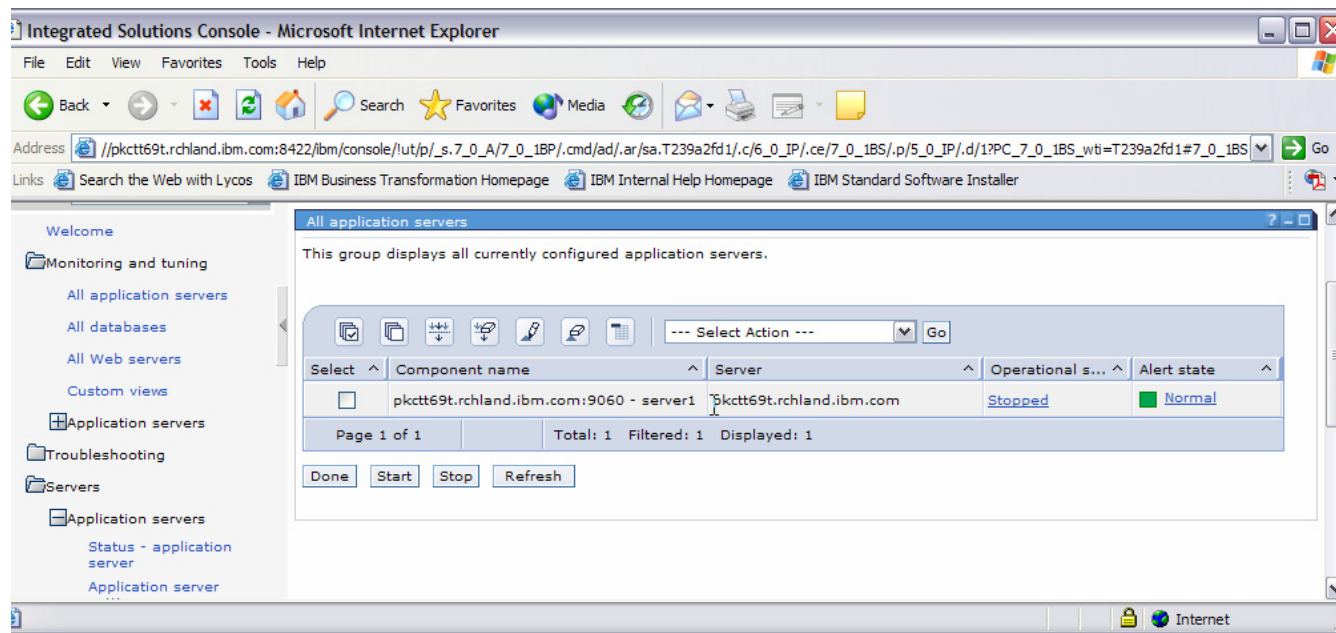
## Agenda

- **Why a new console**
- **Integrated Solutions Console**
- **Console for Express Runtime**
- **Deploying Console for Express Runtime**
- **Using Console for Express Runtime**

## Why a new console

## Why a new console

- Console for Express Runtime allows you to perform many administrative tasks for all middleware components using the same administrative interface.
- If you are a system administrator or a software developer, the console can help you by providing a Web-based centralized location to perform many middleware management and administrative tasks.

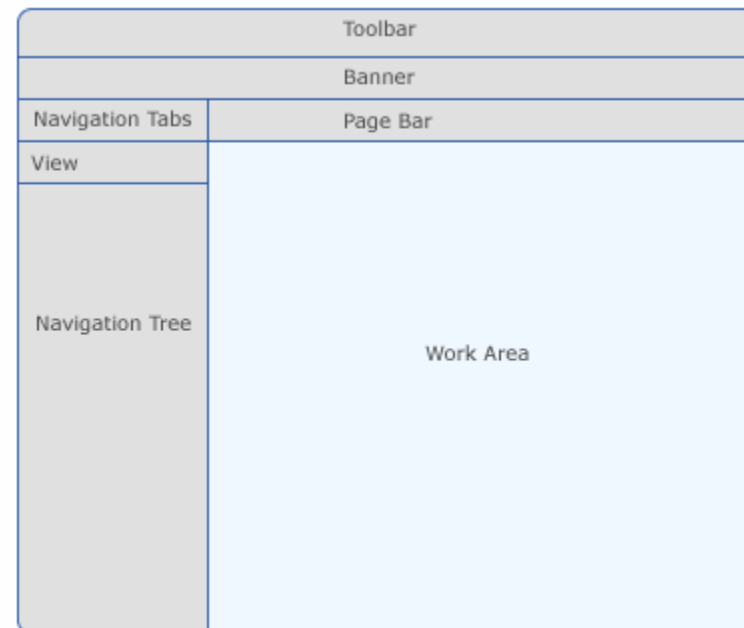


# Integrated Solution Console



## Integrated Solutions Console

- Is based on WebSphere Portal Server
- Is a framework for Console for Express Runtime
- Provides the following features:
  - Console layout
  - Log in service
  - Navigating the console via a browser



## Integrated Solutions Console

- **Supported Web browsers**
  - Microsoft Internet Explorer 6.x
  - Mozilla 1.0.2
  - Mozilla 1.3
  - Mozilla 1.4
  - Netscape 6.2
  - Netscape 7

# Console for Express Runtime v2.1

## Console for Express Runtime: Overview

- **Provides a single, Web-based utility for performing administrative tasks for:**
  - DB2 Universal Database (UDB) Express v8.2
  - WebSphere Application Server - Express v6.0
  - WebSphere Plug-in for IBM HTTP Server v6.0
  - IBM HTTP Server v6.0

## Console for Express Runtime: Features

- **You can perform the following administrative tasks:**
  - Check the status of the application servers, Web servers, and DB2 databases
  - Start and stop the application servers, Web servers, and DB2 databases
  - Configure the logging settings and view logs
  - Perform a one-step database backup
  - Modify WebSphere Application Server - Express configuration settings
  - Filter tasks according to the role you perform

## Console for Express Runtime: Remote Access

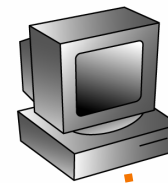
- **You can access the Console for Express Runtime console from a Web browser.**
- **To control the remote machines, you need to deploy **Management Extensions** for the middleware components.**
  - As a result, only middleware deployed through Express Runtime can be managed by the console.
  - To use the console, a remote system needs a specific Console Agent up and running.

# Deploying the Console for Express Runtime

## Deploying Console for Express Runtime\*

- Installation of Console for Express Runtime is a deployment task.
  - You can deploy the Console for Express Runtime on Target Computers by using the Deployment Wizard.
  - You can perform a remote installation of the console using IBM Installation Agent (IIA) on a target computer.

**Deployment wizard with a solution package**



**Deploy solutions to the target machine**



**Target machine with Installation Agent**

\* You cannot deploy the console on OS/400 or IBM i5/OS. You can manage DB2, IBM HTTP Server, and WAS on OS/400 or IBM i5/OS using a console installed on Linux or Windows.



## Deploying Console for Express Runtime (cont.)

- **The deployment task is the easier way to install Console for Express Runtime.**
  - You can use the serialized file `IRU2_1MiddlewareAll.ser` that is prebuilt and provided with the Deployment Wizard.
  - The steps required to install the Console for Express Runtime are the same as deploying any other solution.
  - Security is implemented between the staging server and the target computer during remote deployment:
    - Security keys are automatically created by the key manager on both sides, provided, you specified a secure phrase during IIA installation.
    - Communication between two machines is encrypted.

## Deployment process

- **To deploy the console:**
  - On the target computer
    - Start IBM Installation Agent.
  - On the staging server
    - Start the Deployment Wizard.
    - Open the IRU2\_1MiddlewareAll.ser file.
    - Specify the target computer.
    - Provide the configuration parameters.
    - Deploy Console for Express Runtime.
  - Verify that the installation was successful
    - Use a Web browser to access Console for Express Runtime.

## Demo 5 - Deploying Console for Express Runtime

# Using Console for Express Runtime

## Using Console for Express Runtime

- **Services for Console that start automatically**
  - Console Agent on Middleware computers
    - During the deployment of middleware components, management extension software, for each middleware component, is installed automatically. This software starts Console Agent when the system starts.
  - Console Service on the Console system
    - After deploying Console for Express Runtime, the Console Service is configured to start automatically when the system starts.

## Default URL

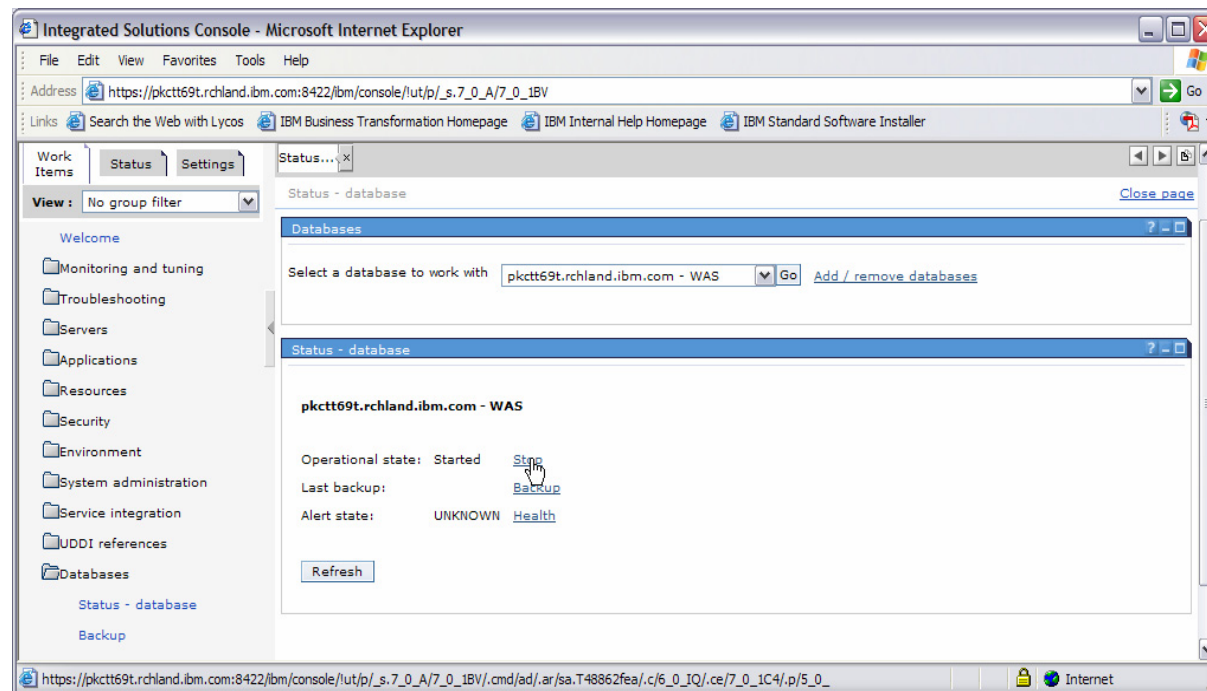
- **You can access Console for Express Runtime via your Web browser**

[http://\[hostname\]:8421/ibm/console](http://[hostname]:8421/ibm/console)

- Here [hostname] is the fully qualified hostname of the computer where you deployed Console for Express Runtime.
- **Access to the console is secured. You need to provide a user ID and password, which you should specify during the deployment of the console.**

## Console for Express Runtime: Administrative interface

- Console for Express Runtime provides the same administrative interface for different middleware components.
- You can check the status of, as well as start and stop, application servers, Web servers, and DB2 databases.



# WebSphere Administration

- Console for Express Runtime allows you to:
  - Test the connection to the WebSphere Application Server - Express system
  - Check the server status
  - Start and stop the server
  - Access the WebSphere Administrative Console interface and perform the administrative tasks within Console for Express Runtime

Integrated Solutions Console

Work Items | Status | Settings

View: No group filter

Welcome

- Monitoring and tuning
  - All application servers
  - All databases
  - All Web servers
  - Custom views
- Application servers
  - Performance viewer
    - Performance monitoring infrastructure (PMI)
    - Request metrics
- Troubleshooting
  - Console agent

Logs and trace

Application servers


Select a server to work with:   [Add / Remove servers](#)

Logs and trace - pkctt69t.rchland.ibm.com:9060

**Logging and Tracing**

Specify how the server will handle log records. Select an application server to enable or disable a system log for that server, specify where log data will be stored, and choose a format for log content. You can also specify a log detail level for components and groups of components.

Preferences

Server	Node	Version	Type	Status
<a href="#">server1</a>	pkctt69tNode01	6.0.0.1	servers	
Total 1				



# DB2 UDB Server Express Administration

- Administer DB2
  - Test the connection to the DB2 system
  - Check the status of your database from the console
  - Monitor the health of the database and see the alerts generated by the Health Center
  - Perform a one-step backup of the selected database from the console

Database health Close page

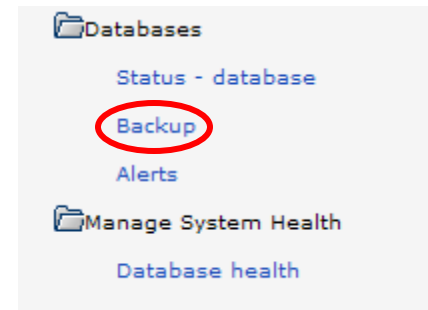
Alerts ?

... Select Action ... Go

Database	System	Alarm	Warning	Attention
<a href="#">TRADEDB</a>	pkctt69t.rchland.ibm.com		0	0
<a href="#">WAS</a>	pkctt69t.rchland.ibm.com		0	0

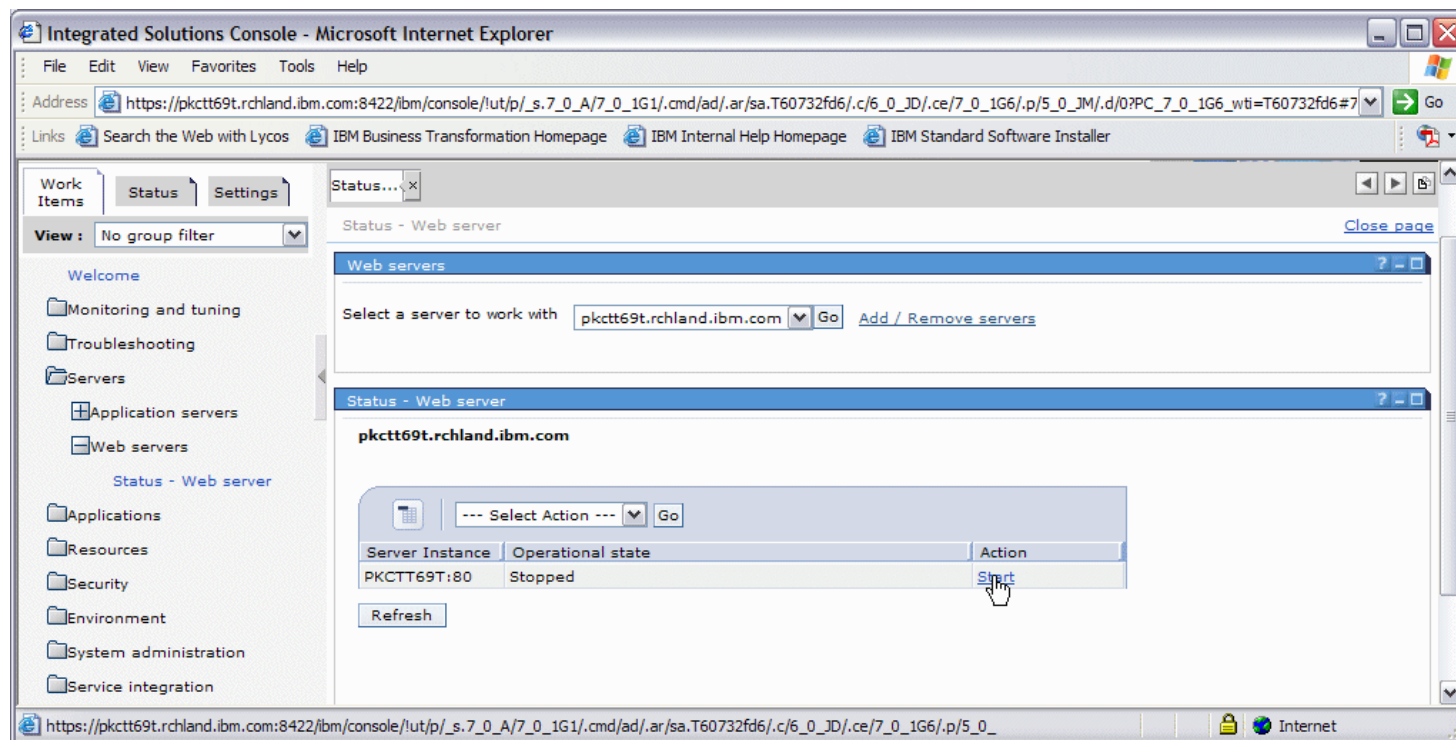
Page 1 of 1 Total: 2 Filtered: 2 Displayed: 2

Refresh



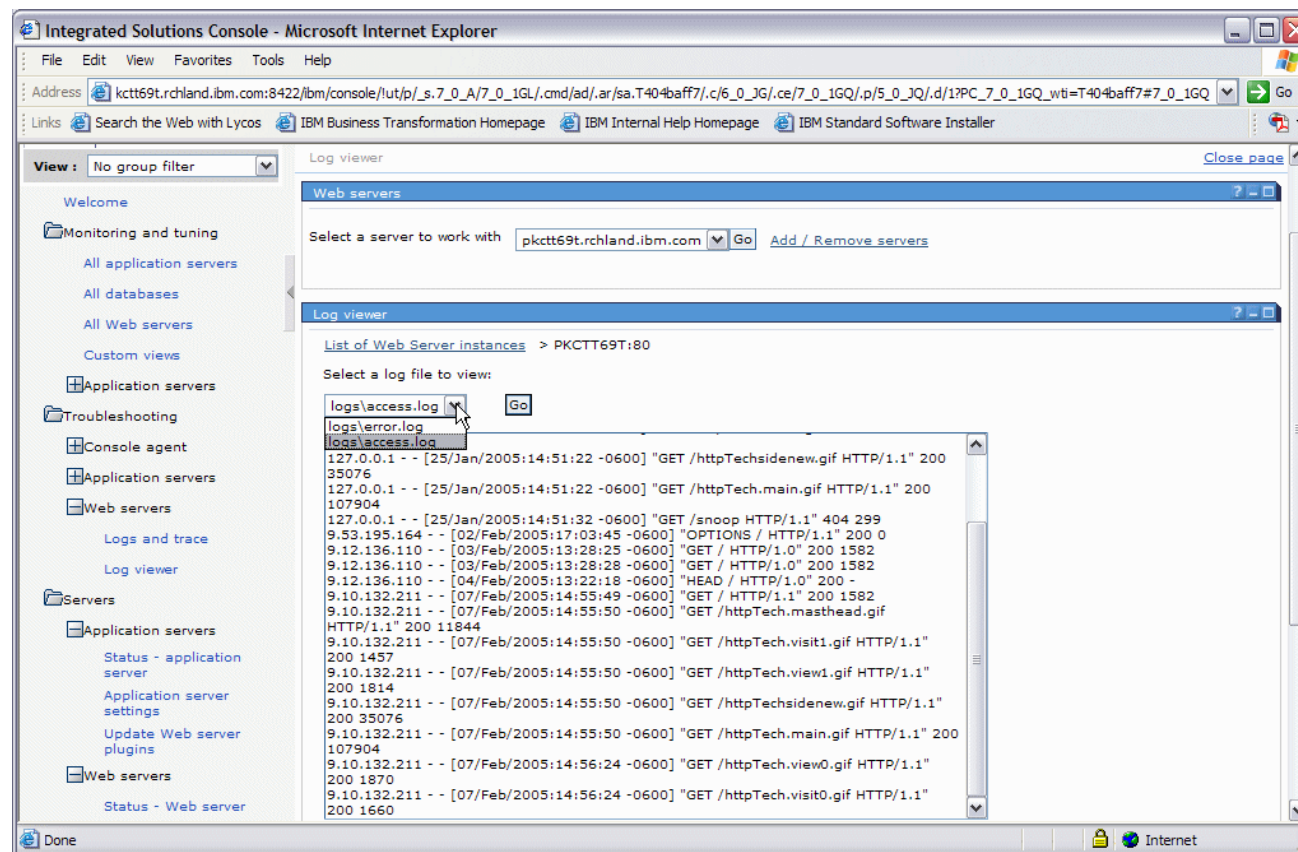
# IBM HTTP Server Administration

- You can:
  - Test your connection to the server
  - Check the status of the HTTP server
  - Start and stop the HTTP server



## Viewing the logs

- You can view the log files in the console from the IBM HTTP Server and WebSphere Application Server - Express.



## Demo 6 - Using Console for Express Runtime

End of the module