

Lotus knows.

Smarter software for a Smarter Planet.

IBM® Lotus® Sametime® 8.5
- WebSphere Administration for Sametime Admins

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Subject Matter Expert for Lotus Sametime



Agenda

- Introduction
- Experience the platform
- DB2
- Install Manager
- Lets see it Live
- Tips and Tricks

What do you know about WebSphere?

- WebSphere is a Platform for many applications
 - Portal
 - Learning
 - Workplace
 - Connections
 - Sametime Gateway
 - Sametime EMS
 - Sametime 8.5 new components
- WebSphere can have many different connections
 - Database
 - LDAP
 - SIP
 - Java
 - HTTP
- Administration with the Browser
- Can be clustered and scaled

Domino – The Platform you know

- IBM proprietary Server platform
- IBM proprietary Database format - .NSF - .NTF
- Clustering
- Partitioning
- Topologies (Hub - Spoke)
- Database connectivity (DB2 – Removed in 8.5)
- Platform for many applications
 - Notes Mail and Calendar
 - Rooms and Resources reservation system
 - Notes Team Rooms
 - Notes other (customized) applications
 - QuickR
 - Sametime Community Services & Classic Meetings
- HTTP Server included
- Administration with the Lotus Notes Admin Client

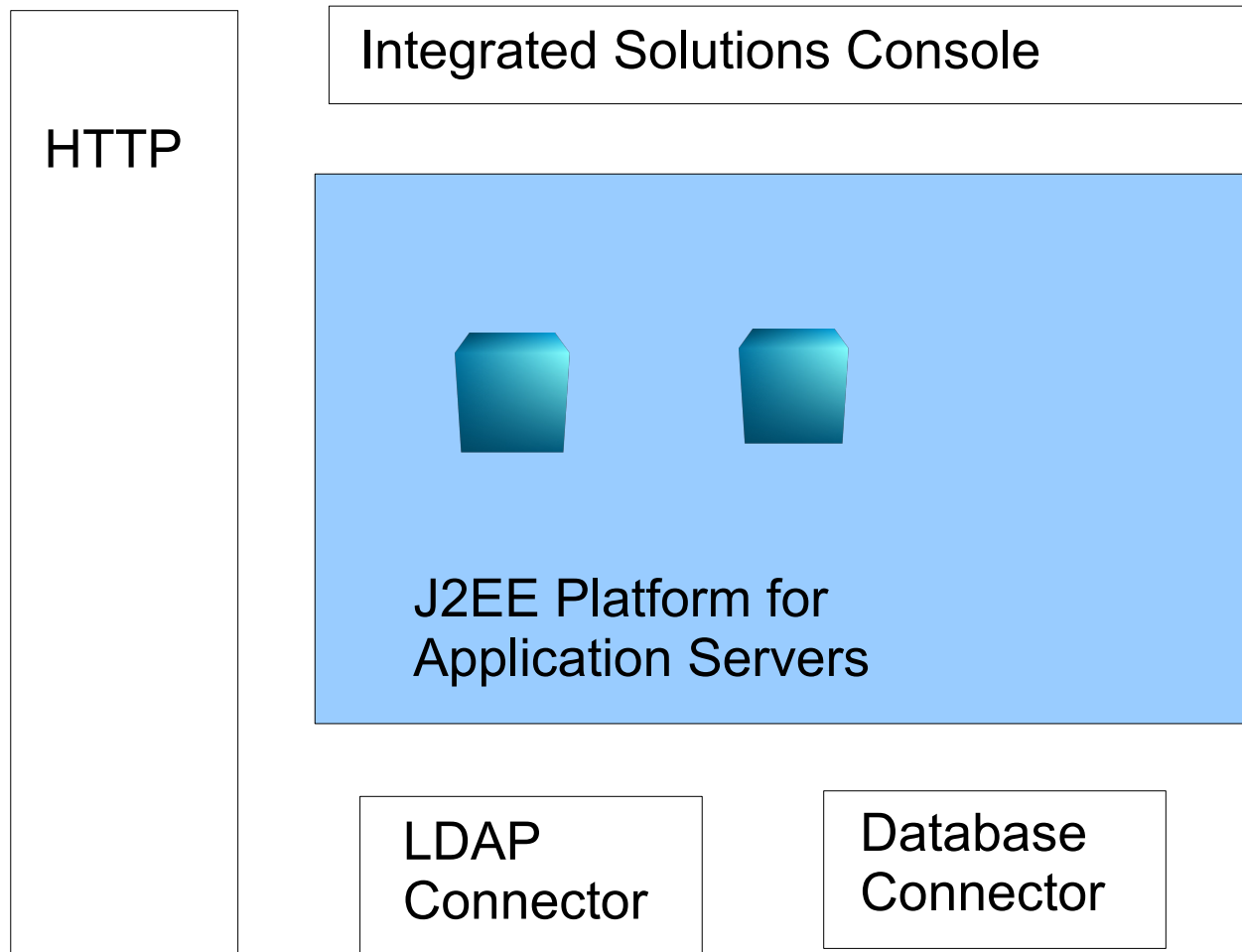
WebSphere – that's new, or not?

- JAVA Platform - open standard format
- Connectivity to standard Databases
 - DB2
 - Oracle
 - MS-SQL
- Connectivity to LDAP
 - Domino LDAP
 - IBM Tivoli Directory Server
 - Open LDAP
 - SunOne iPlanet
 - MS Active Directory
- Clustering - Horizontal or Vertical
- HTTP Server included
- Profiles (similar to Domino Partitioning)
- Administration with the Browser (Integrated Solutions Console)
 - But you know the Domino WebAdmin database?

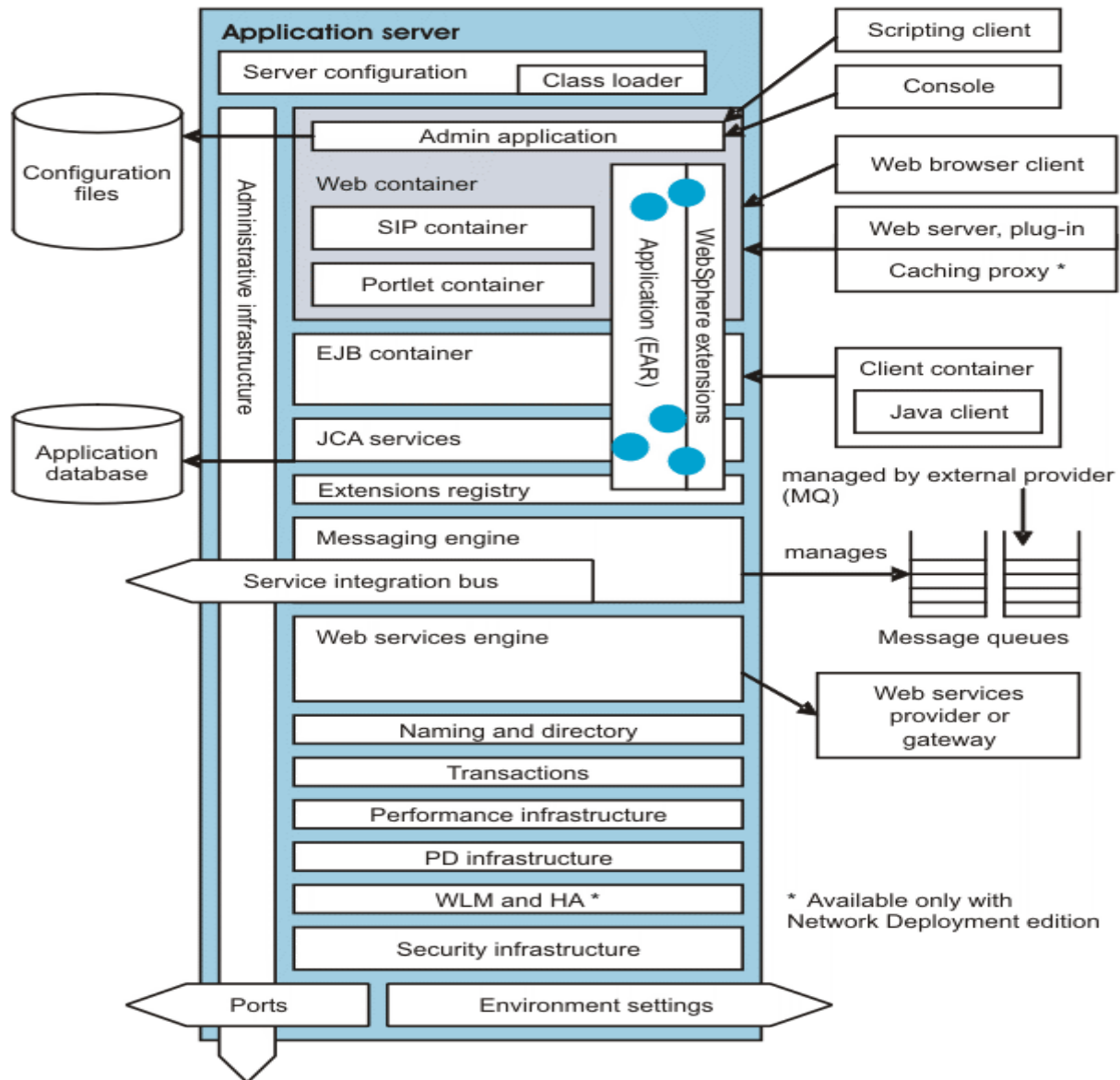
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WebSphere® Application Server Overview



WebSphere Application Server Overview



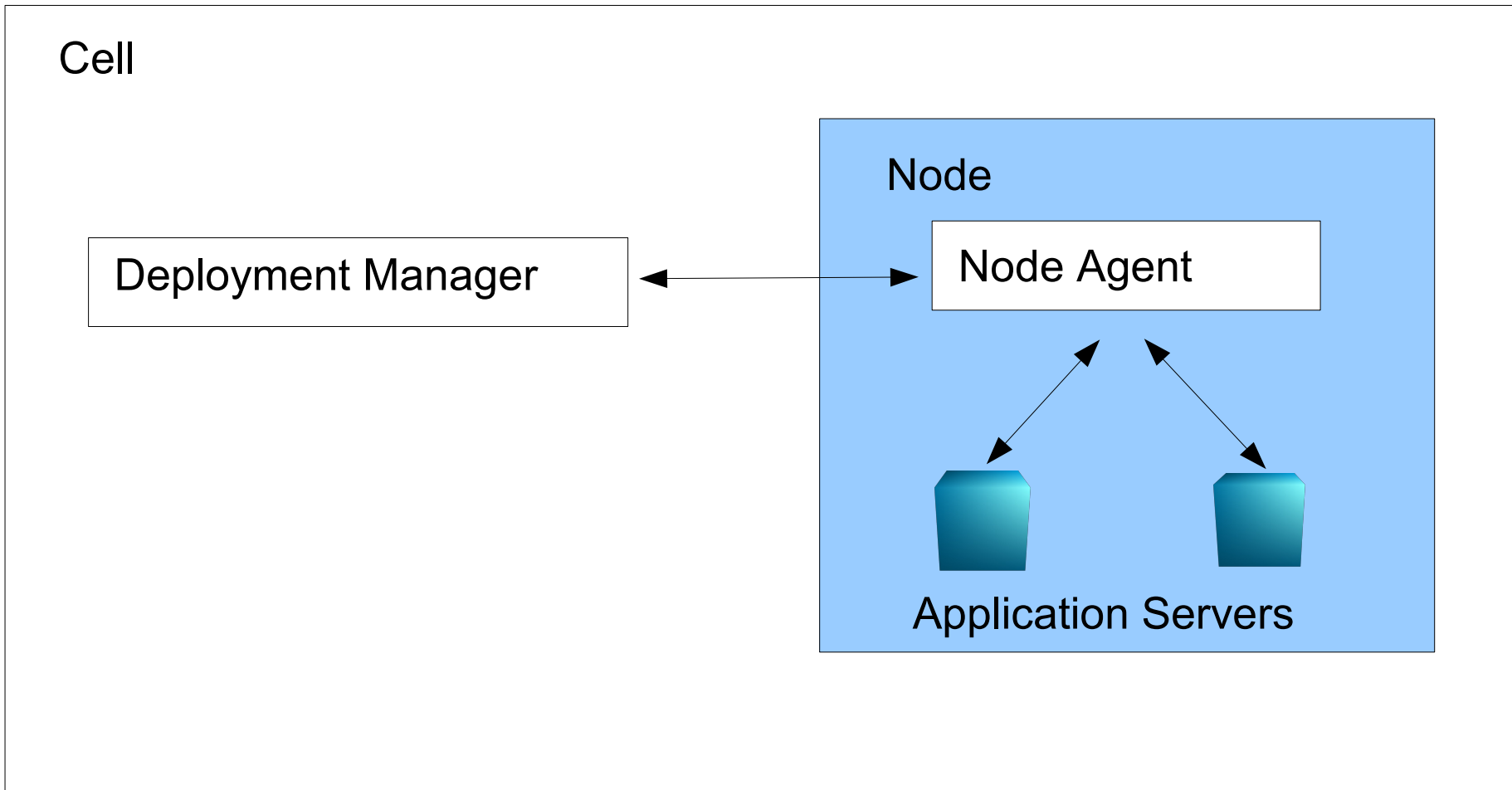
WebSphere® Application Server

- **Node** - Logical group of server-managed processes that share a common configuration repository.
- **Cell** - Grouping of nodes into a single administrative domain, all nodes are administered from a deployment manager server.
- **Deployment Manager** – Allows the administration of multiple nodes from one centralized location.
- **Node Agent** - Works with the deployment manager to perform administrative activities on the node.
- **Application Server** - Supports and hosts user applications. Runs on only one node, can support many application servers.

Profiles - Cell Profile

- Creates a Deployment Manager Profile and a federated Application Server Profile
- Internally, 2 profiles are created
 - Deployment Manager profile
 - Application Server profile
- The Application Server is federated to the cell of the Deployment Manager.
- Deployment Manager and Application Server reside on the same system.

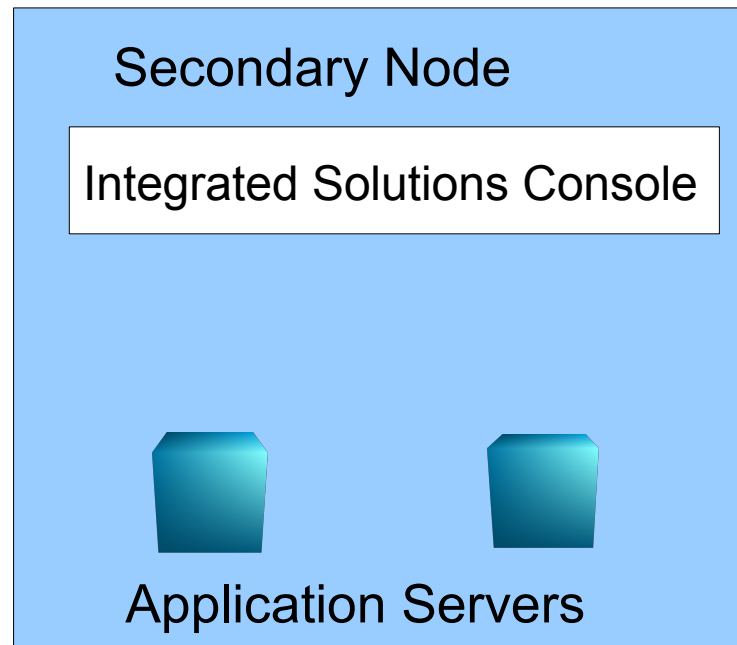
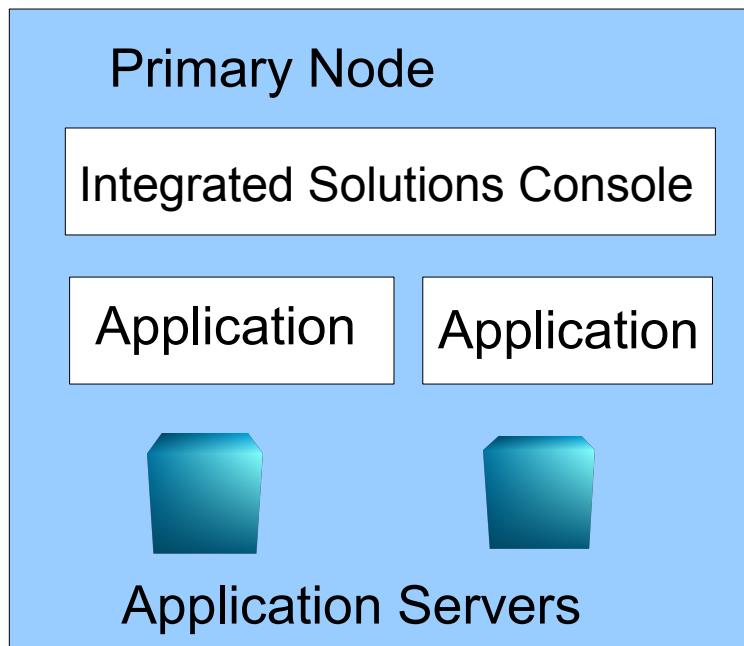
WebSphere® Application Server Deployment



Profiles – Primary and Secondary Node

- Creates Only a Application Server Profile
- Installs the Application Server Platform
- Has its own Administration Interface (Integrated Solutions Console)
- The Primary Node has the application installed
 - Can run standalone or can be federated to a cell
- The Secondary Node does not have a application installed
 - Gets the application when federated to a cell

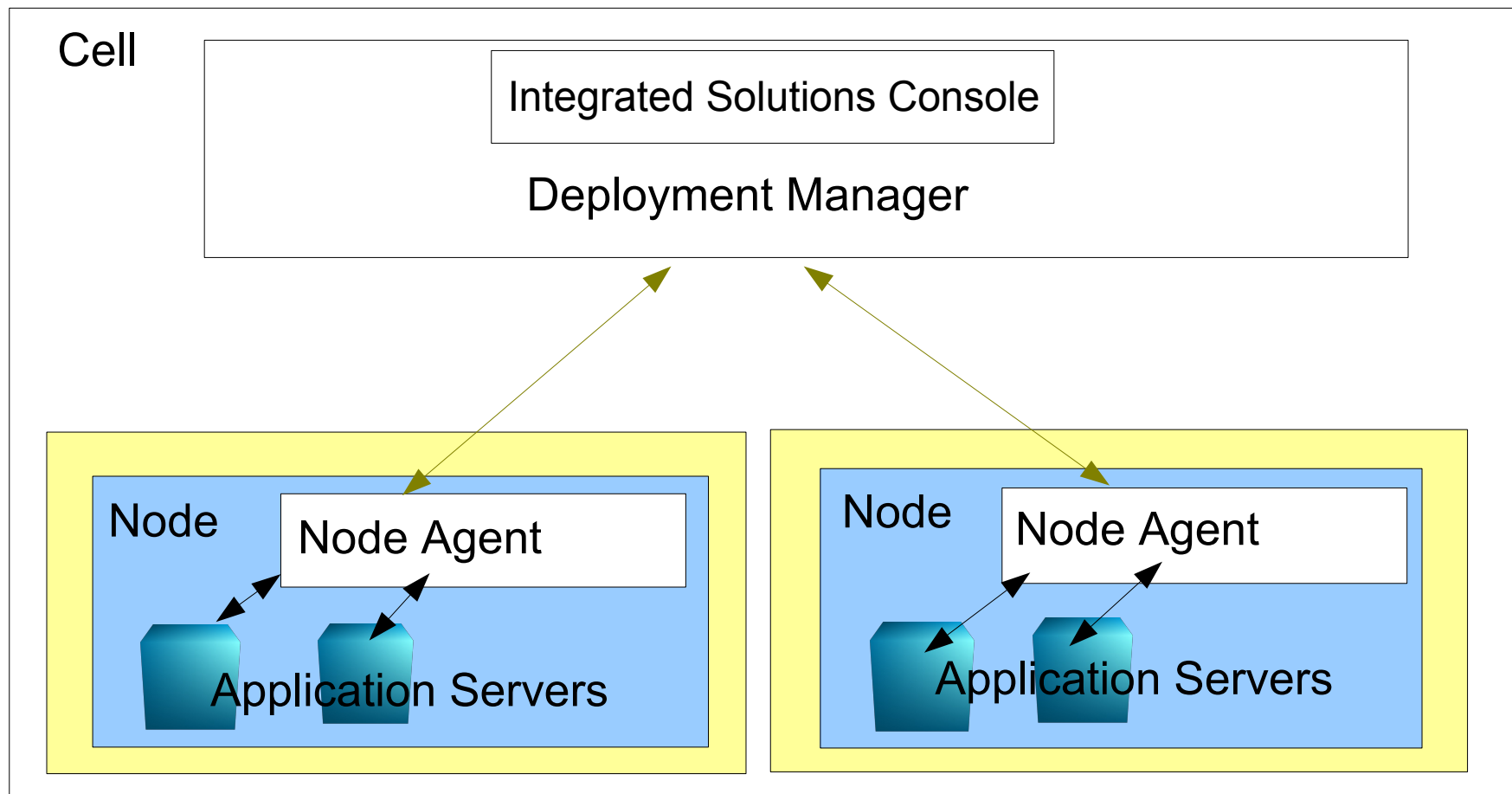
WebSphere® Application Server Deployment



WebSphere® Application Server

- **Cluster** -
 - A group of servers that are used for the same purpose and are identified by a single host name.
 - **Horizontal Cluster** - Cluster members are on multiple nodes in a cell.
 - **Vertical Cluster** - Cluster members are on the same node in a cell.
 -
- **Federation** – Process by which a node becomes part of a cell
 - A node agent server is created on the node to manage the WebSphere Application Server environment on that node.
- **Integrated Solutions Console**
 - Provides a single, common interface for system administration.
 - Provides the main platform on which IBM and non-IBM products can build administrative user interfaces as individual plug-ins to a common console framework.

WebSphere® Application Server Deployment



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DB2

- What is DB2
 - A Plattform for relational Databases
- Installation
 - For Sametime uses the Installation Manager – simple installation
- DB2 Admin User
 - Created in the local OS, if AD in place be careful with the password.
- DB2 Administration
 - Many ways. Most useful with the DB2 Control Center
- Start and Stop DB2
 - Service, Task bar, Commandline, Control Center
- DB2 Control Center
 - Maintain Databases for Backup or configure HADR
- DB2 Command Line Tools
 - Enter SQL commands directly

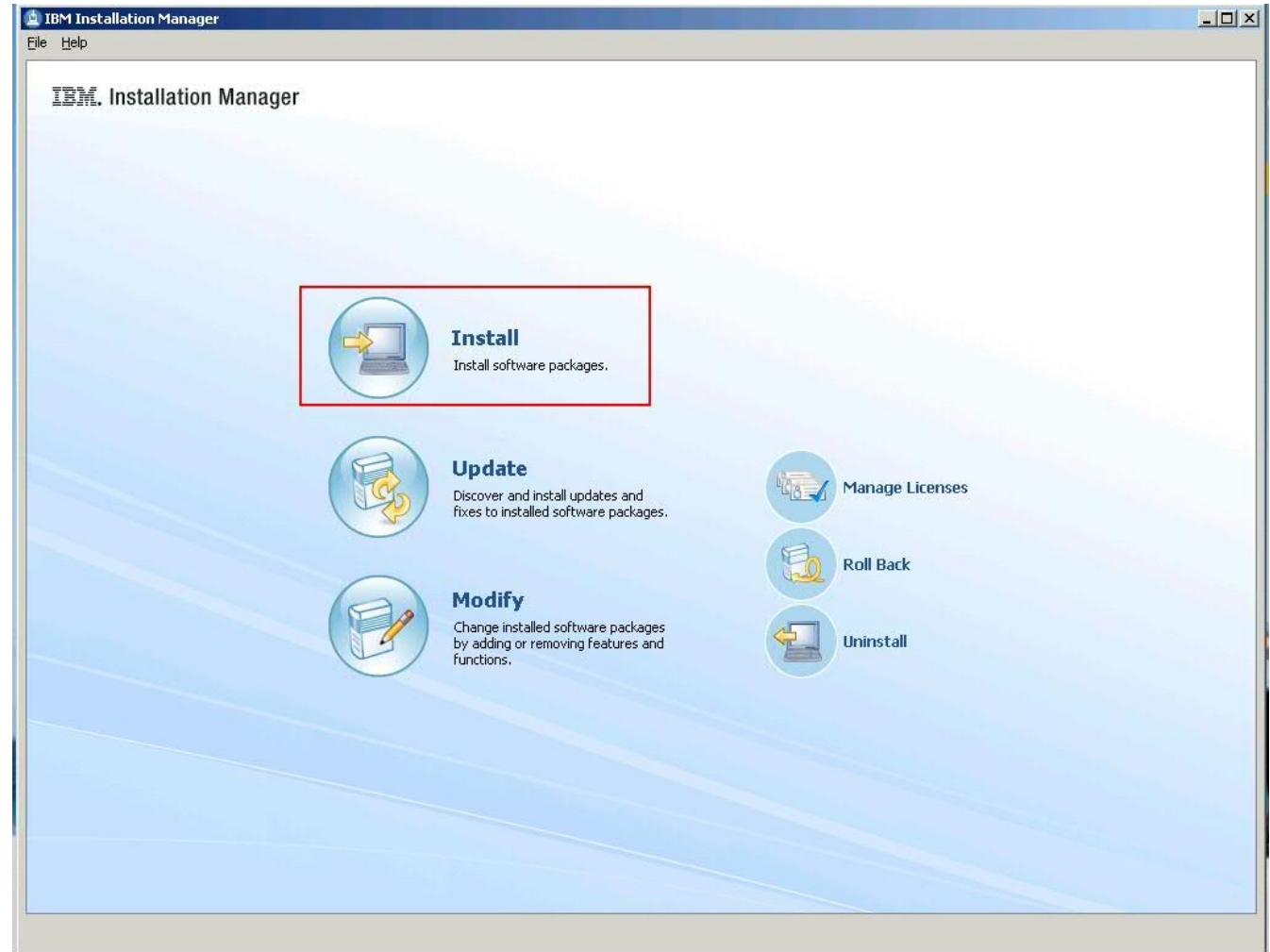
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IBM® Rational® Installation Manager - IM

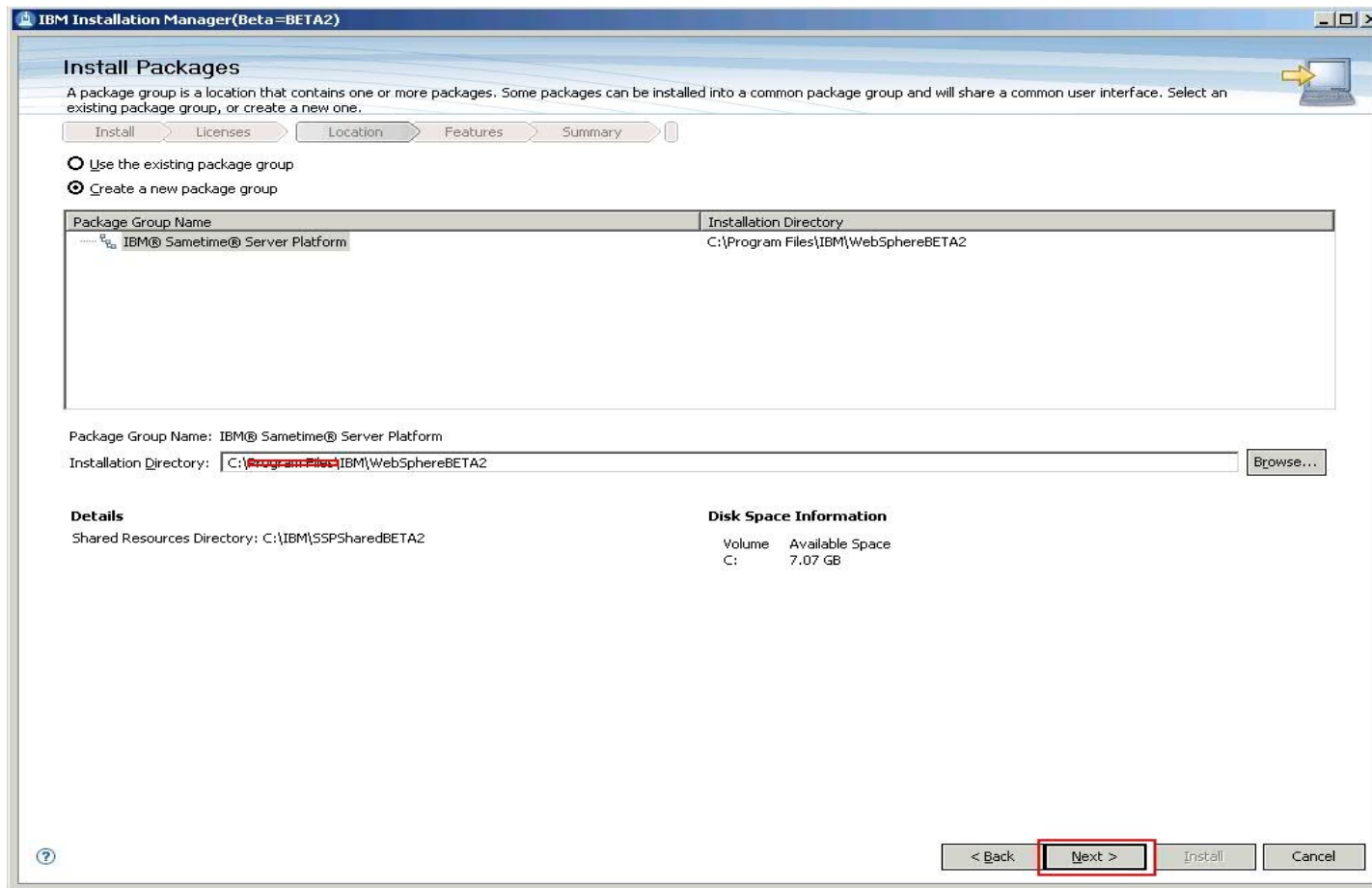
- Eclipse run-time based program to manage entire life-cycle of product packages

- Installation
- Updates
- Roll Back
- Modification
- Uninstall
- Install Fixes
- PMR work



Install Manager

- First WebSphere Server installation
 - New Package Group
- Second Server Installation
 - Use Existing Package Group



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Tips and Tricks

- While creating plan for a product or installing the product, make sure all the servers should be reachable from each other.
 - Add hosts entries in all servers if not present in DNS.
- While creating databases, make sure same database is not shared between two products.
- While getting plan from SSC from installer, if the connection is too slow, you may have to increase the time-out period.
 - Create an environment variable
ST_SSC_CONNECT_TIMEOUT=60/120 (Time in secs)
- Do not include "=" signs in Deployment name in productConfig.properties required for registration.
- LDAP details need to be entered in productConfig.properties file while registering Gateway server

Tips and Tricks - contd.

- To change an existing LDAP for a product Server(e.g. Sametime Meetings)
 - Add a new LDAP with SSC, and manually configure with meeting server
- To register Secondary Node using registration utilities, DB and LDAP host entries should be entered manually before registrations
- How to install IBM Lotus Sametime Community Server on pure IPv6 machine.
 - For pure IPV6 environment
 - Through installer install Community Sever without SSC.
 - Later register this server with SSC using utility.
 - For mixed environment (IPv4 and IPv6) look at the document here:
 - https://idoc2.swg.usma.ibm.com/sametime/index.jsp?topic=/com.ibm.help.sametime.v85.doc/install/inst_config_hat_ipv6_deployplan.html

Troubleshooting

- All error messages get logged to the SystemOut.log on the SSC dmgr and STConsoleServer, occasionally the nodeAgent.
- Location for SSC server logs
 - ISC Portlets - Client side logs
 - <WAS_INSTALL_ROOT>\profiles\STSCDMgrProfile\logs\dmgr
 - SSC Server – Server side logs
 - <WAS_INSTALL_ROOT>\profiles\STSCAppProfile\logs\STConsoleServer
- Location for SSC client registration utility
 - <Product_Install_Location>\console\logs
 - e.g. C:\WebSphere\STServerCell\console\logs
- For any issues related to authentication/security,
 - check deployment manager logs

Troubleshooting - contd.

- The most common problem is that the servers are not started properly. SSC is a cell profile- this means it has a dmgr, a node agent, and an application server, all 3 need to be running for proper functionality.
 - startManager.bat(sh)
 - startNode.bat(sh)
 - startServer.bat(sh) STConsoleServer
- Make sure there is no clock skew between servers.
 - Possible error security tokens no longer valid.
- Creating more than one plan for community server on single machine is invalid.
 - SSC will not validate Domino credentials in this scenario

Troubleshooting - contd.

- All SSC errors start with 'AIDSC' followed by a 4 digit number
 - e.g. 'AIDSC1234E'. Look for these errors first when debugging SSC errors
- LDAP known issues
 - saMAccountName attribute for Active Directory should not be used - enter uid instead, it will map accordingly to this attribute.
 - Admin name used for WebSphere should not match a username in the LDAP

Troubleshooting - contd.

- Troubleshooting Federation
 - Federation adds the nodes into the dmgr's cell. Most issues with clustering in 8.5 are around federation.
 - Before federation there is some validation in the Guided Activity to prevent users from running into problems (clock sync issues, etc.)
 - Debug as a normal WAS addNode command
 - check addNode.log, on the nodes in logs directory
 - Check for product technotes for all known issues that we may have skipped here...

Troubleshooting - contd.

- Troubleshooting other Clustering issues
 - Ensure that all nodes have been synchronized before restarting the node agents.
 - Occasionally the deployment manager will have to be restarted in the middle of the clustering guided activity,
 - Guided Activity will tell you when it is appropriate to do so.
 - You can pick up where you left off by using the 'Modify Existing Cluster' option.
 - All Clustering Guided Activity actions will log to the deployment manager's SystemOut.log.
 - The Clustering GA will print error messages to the browser for the most common user errors
 - (clock sync issues, node not started, etc)

Troubleshooting - contd.

- Installation issues
 - It is always good to use shorter install path names as WAS allows only 80 characters for the profile path name
 - Make sure that the LDAP/DB2® hostnames are reachable from the product machines during installation
 - Sometimes it is required to use authenticated access for LDAP. Even though validation passes, when installing WAS is not able to retrieve all attribute values.
 - Make sure that the DB2® user id which is being used during install has admin rights
 - Before starting uninstall , stop all the servers.

Troubleshooting - contd.

- Installation issues
 - When installing multiple products on same machine ,only Cell profile types can co-exist.
 - System Console & Meetings databases are mutually exclusive.
 - Do not use System Console database for attaching into the meetings Server deployment plan.
 - For AD LDAP, way to consume the "samAccountName" attribute within WAS is by specifying "uid" (a VMM property) during LDAP plan creation/IM installation as WAS already has a internal map of the uid property to samAccountName
 - Short host names should be 11 characters or less when planning installations from the Guided Activities in the 8.5 release (bug will be fixed in the next release)

Firewalls and Ports

- The System Console Server needs access through the following ports for the following servers
 - Meetings, Gateway, Media, Proxy
 - SOAP port (default 8880)
 - AboutThisProfile.txt SOAP connector port value
 - Meetings needs access to SSC db (default port 50000 on windows)
 - Community
 - Community HTTP or HTTPs (default 80 and 443)
 - Community needs access to SSC HTTP or HTTPS (default 9080 and 9443)
- Installation Utilities need access to SSC
 - SSC HTTP or HTTPs (default 9080 or 9443)
- DB2® port (default 50000 on windows)
- LDAP (default 389 or 636)

Important Links

- <http://publib.boulder.ibm.com/infocenter/ieduasst/v1r1m0/index.jsp>
- <http://publib.boulder.ibm.com/infocenter/wasinfo/v7r0/index.jsp>

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