

1 Managed Enterprise Application Server Service Description

1.1 Overview of Service

This service provides configuration, monitoring, and management of a Managed Enterprise Application Server on top of supported Operating Systems in the Client's on-premises, cloud or colocation data center as specified as In Scope in the SOW.

This service does not include the management of the underlying operating systems, which must be contracted separately and specifically identified as In Scope in the SOW with an appropriate Service Description.

1.2 Client Responsibilities

Client is responsible for:

- (a) Management of licenses
- (b) Any license, software or use rights must be provided to NTT
- (c) Anything requiring physical access
- (d) Client must provide a support and maintenance agreement from the OEM and provide access to NTT
- (e) Any access required by NTT
- (f) Anything not specifically identified as in scope in the SOW

1.3 Service Specific Operations

(a) Monitors

The following monitors can be configured default, if supported by the hardware and software:

Monitor	Description	Alerts	Performance Info	Resolution
Availability of the Application Server	The application server system service is up and running	Yes	CPU/RAM/Process count	Engineering Teams will attempt to diagnose, try to solve the issue and escalate to the Client if needed.
Availability of the Application Server ports	A connection to configured ports can be performed and the banner is returned	Yes	N/A	Engineering Teams will attempt to diagnose, try to solve the issue and escalate to the Client if needed.
URL content verification	Download of a given URL (with parameters and certificates) to verify the returned content	Yes	Header Response Time	Engineering Teams will attempt to diagnose, try to solve the issue and escalate to the Client if needed.
Performance counters: . Number of threads . Available memory	Collected Data	No	Number of concurrent connections on the server, number of queued requests waiting to be served.	N/A
Cluster health check (only cluster setup)	Check the cluster, nodes and pools health	Yes	N/A	Engineering Teams will attempt to diagnose, try to solve the issue and escalate to the Client if needed.

(b) Service Requests

As part of the Service, the fulfillment of the following types of requests are available subject to change control:

All tasks mentioned below that has vendor documentation and support will be carried out in accordance with that documentation or support recommendation by the vendor.

Task	Description
Management of virtual hosts	Creation, change and deletion of virtual hosts, including the management of bindings, application properties, resource limits, changes to mime-types

Management of domains and contexts	Creation, change and deletion of contexts, including setting of permissions, redirections, and security settings
Management of listeners and instances	Creation, change and deletion of listeners for different protocols and ports, and instances for the implementation of additional server features
Installation of additional Java libraries	Installation and configuration of additional .jar files on the shared spaces in the server
Configuration of JNDI connections	Creation, change and deletion of shared data sources, both global at the server level and local at the context level
Installation of SSL certificates	Generation of CSR's, install and import of SSL certificates and intermediate CA's
Deployment of Applications (WARs, EARs and EJBs)	Deployment and verification of applications using customer-provided files (troubleshooting of customer developed apps will be lead/executed by the customer)
Management of the deployment manager application	Creation of users, changes in permissions, password changes for the manager application
Changes in the transaction/URL monitors	Implementation of changes in the monitors associated with the service, including recreation of the monitors and changes to the content
Management of performance parameters of the server	Implementation of changes to the parameters that affect the performance of the server, including resource limits, threading, memory allocation, etc.

All of the above tasks will be performed according to the Change Management process defined for Client.

1.4 Supported Technologies

Only the following versions are supported:

Vendor Product	Version	Operating System
IBM Websphere	8.5.x 9.x	All OS must be currently supported by Vendor
Oracle Weblogic	12c 14c	

While these Application Servers are supported on the above operating systems, the NTT highly recommends a Linux based OS for better security, operability and performance

The following configurations are supported:

- (a) Standalone Application Server: A single server; and
- (b) Clustered Application Server: Two or more servers clustered using supported clusterware (Team Cluster, Session replication, single session storage, load balancing).

The specific configuration and technology must be identified as In Scope in the SOW.

1.5 Supported Environments

Only the following environments are supported:

- (a) Client premises during transition service phase
- (b) Colocation data center
- (c) Cloud

1.6 Limitations

The following limitations apply:

- (a) A valid license and vendor support contract from the OEM is required and access must be provided to NTT
- (b) Only supported and non-end-of-life versions will be supported, according to vendor compatibility and requirements
- (c) In any production environment it is mandatory to have a web server in front of the Application Server redirecting requests to the Application Server. The Application Server will, therefore, never be exposed directly to Internet.

1.7 Tasks Included in the Standard Transition

As part of the Service, the only following tasks are included in the setup fee:

- (a) Installation and configuration of the necessary packages (JVM)

- (b) Configuration of the necessary operating system parameters (kernel, libraries, limits)
- (c) Configuration of the required IIS/Apache parameters (ISAPI filters, mod_jk, mod_proxy_ajp)
- (d) Installation of the IBM WebSphere or Oracle WebLogic application server
- (e) Configuration of the service management scripts (start, stop)
- (f) Configuration of the service parameters (RAM)
- (g) Configuration of the security environment, application of the security policy and hardening
- (h) Configuration of the caching and concurrency (threads) parameters
- (i) Configuration of the database connections and pools (JDBC drivers)
- (j) Configuration of the application contexts
- (k) Configuration of mail connections
- (l) Configuration of additional Java libraries
- (m) Configuration of a status worker
- (n) Clustering configuration (Domains, Applications, Pools, Queues)
- (o) Configuration of the Servlet Runner part of the server (contexts, ports)
- (p) Installation and Configuration of additional EJB's and Java Libraries.
- (q) Tasks Included in a Takeover of Client System

As part of the Service, the following tasks are included in the takeover of a client system:

- (i) Perform operational readiness inspection and make changes as needed to the configuration of the security environment/security policy and/or system normalization.

1.8 Tasks Not Included in the Standard Transition

The following tasks are not included in the standard transition:

- (a) Anything that hasn't been explicitly mentioned before
- (b) Anything requiring physical access
- (c) Any software, license or use rights
- (d) Any access rights
- (e) Anything not explicitly identified as in-scope in this SOW.