WebOTX Application Server Express V8.4

Trial Version (Windows)

Setup Card

Introduction

Thank you for downloading WebOTX Application Server Express Trial Version.

This document explains their installation procedures. Be sure to read this document before using this product.

In this manual, WebOTX Application Server is hereinafter referred to as "WebOTX AS".

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1. Operating Environment

Software Conditions

This section explains the operating system (OS) supported by WebOTX Application Server Express Trial Version, and the software required to use each function in the trial version.

- ### Operating system (OS)

This product supports the following 32-bit operating systems.
The trial version supports only 32-bit Windows operating systems.

   Windows Server® 2008 Standard (*1)
   Windows Server® 2008 Enterprise (*1)
   Windows Server® 2008 Datacenter (*1)
   Windows Server® 2003 R2, Standard Edition
   Windows Server® 2003 R2, Enterprise Edition
   Windows Server® 2003 R2, Datacenter Edition
   Windows Server® 2003, Standard Edition
   Windows Server® 2003, Enterprise Edition
   Windows Server® 2003, Datacenter Edition

   (*1) WebOTX AS Trial Version does not support Server Core.

- ### Java 2 SDK, Standard Edition

WebOTX requires the **Java SE Development Kit (JDK)** during runtime. The following JDK versions are supported.

   J2SE 5.0
   Java SE 6

There are several cautions and restrictions regarding the versions of JDK that you may use:
   WebOTX supports only the JDKs that are provided by ORACLE Corporation.
The Cautions when using J2SE 5.0
   In an IPv6 network environment, JDK 5.0 Update 12 and later are supported.
   When using WebOTX in Windows Server 2008, JDK 5.0 Update 19 and later are supported.
   When using WebOTX in Windows Server 2008 SP2, JDK 5.0 Update 21 and later are supported.

The Cautions when using Java SE 6

When using the WebOTX system in Windows Server 2008, JDK 6 Update 16 and later are supported.

- **Web browser plug-ins**

For WebOTX V8.4, you can manage WebOTX runtime environment with the integrated management console using Ajax through a Web browser. You need Internet Explorer 6/7/8 or FireFox 3.0-3.6 when using this feature.

- **Supported software - Web servers**

This product supports the following Web servers.
   Java-based Web server (*1)
   WebOTX Web server 2.0.64 or later, 2.2.17 or later (*2)
   Internet Information Services (IIS) 6.0, 7.0
   Apache HTTP Server 2.0.64 or later, 2.2.17 or later
   Oracle iPlanet Web Server 6.1, 7.0

*1) "Java-based Web server" is installed by necessity.

*2) The WebOTX Web server is based on the Apache HTTP Server 2.0.64/2.2.17.

- **Supported software - Database server**

WebOTX supports the following database products.

WebOTX AS is designed to support connection to any DBMS through JDBC drivers compliant to JDBC 2.0 -JDBC 4.0 specifications. Users must obtain and install the JDBC driver bundled with their database server if an application connects to the database server using original technology, or to connect through the JDBC data source provided by WebOTX AS, or to execute JTA transactions linked to WebOTX Transaction services.

The following JDBC drivers have been verified to operate with WebOTX AS.

JDBC Vendor	JDBC driver type	Supported database server	Remarks
Oracle	Type 2, 4	Oracle9i Database Release 2 (9.2.0)	(*1)
		Oracle Database 10g Release 1 (10.1.0)	
		Oracle Database 10g Release 2 (10.2.0)	
		Oracle Database 11g Release 1 (11.1.0)	
		Oracle Database 11g Release 2 (11.2.0)	
IBM	Type 4	DB2 Universal Database 8.1.4	
		DB2 V9.1	
Microsoft	Type 4	Microsoft SQL Server 2000	
		Microsoft SQL Server 2005	
		Microsoft SQL Server 2008	
Sybase	Type 4	Sybase Adaptive Server Enterprise 12.5	

DataDirect	Type 4	Oracle connection via "Connect for JDBC 3.3 or later"	
	Type 3	Oracle connection via "SequeLink for JDBC 5.0"	
PostgreSQL Development Group	Type 4	PostgreSQL from 7.3.2 (JDBC driver 7.3 Build 113) to 8.3.1 (JDBC driver 8.3 Build 603)	(*2)
Cloudscape	Type 4	Cloudscape 3.0.3 (bundled with J2EE 1.3.1 SDK)	
Apache Derby	Type 4	Apache Derby 10.2.2.0 ~ 10.5.3	

WebOTX AS passes the Compatibility Test Suite for Java EE 5 specifications (Java EE CTS) when using "Connect for JDBC 3.5" with "Oracle 10g".

Other products such as MySQL Connector/J 5.0 may also be linked with WebOTX AS as long as their JDBC driver complies with JDBC 2.0 - JDBC 4.0 specifications. However, thorough testing is required.

Notes:
    (*1) The following patch must be applied in order to execute two-phase commits using functions in Oracle Real Application Cluster (RAC) and X/Open XA.
        - PSR 9.2.0.7
        - PSR 10.1.0.3
    For details on patches, refer to information provided by Oracle.
    (*2) To use the two-phase commit protocol with PostgreSQL, install PostgreSQL 8.1 and JDBC driver version 8.1-404.

Required Resources

This section explains the amount of hard drive space required installing WebOTX AS, and the amount of memory required during the installation and subsequent initialization.

The hard drive space requirement shown below is for a full installation of all features and products. Please note that this does not include the drive space needed for other software components such as the C compiler and JDK (J2SE SDK).

The memory requirements are based on operation using the defaults selected during installation.

- Hard disk space requirements

    200 MB

- Memory requirements

    For 32-bit OS (x86)   256 MB minimum, 512 MB or greater recommended

2. Installation Procedures

Pre-Installation

Take note of the following before installing.

- Download the installer of WebOTX AS Express Trial Version (i.e. **OTXEXP84e.exe**) from WebOTX web page before.

- WebOTX online manuals describe installation procedures in detail. The manuals are available from WebOTX web page.

- The user installing this product must be a member of the Administrators group and have Administrator privileges.

- The WebOTX installer will setup Java during the installation process. **Make sure that the JDK (J2SE SDK) is already installed before installing WebOTX.** If not, install the JDK before installing WebOTX.

- If a Web server such as Microsoft Internet Information Service (IIS) or Oracle iPlanet Web Server is running before installing WebOTX, settings such as the port numbers used by WebOTX may be duplicated. To avoid this problem, stop the Web server temporarily. For stopping procedures, refer to the manual for your Web server.

Installing WebOTX Application Server Express Trial Version

(1) **Launching the installer**

Launch **OTXEXP84e.exe** file which is an installer of WebOTX AS Express V8.4 Trial Version for Windows.

The InstallShield installer will start and display the message "Preparing to install...", followed by the dialog bellow. Click [Next].

(2) **[Customer Information] dialog**

When the [Customer Information] dialog appears, enter your name and organization information in the [User Name] and [Organization] text boxes. Enter **NOREGISTEXP** in the [License Key] box. Verify the information is entered correctly and click [Next].
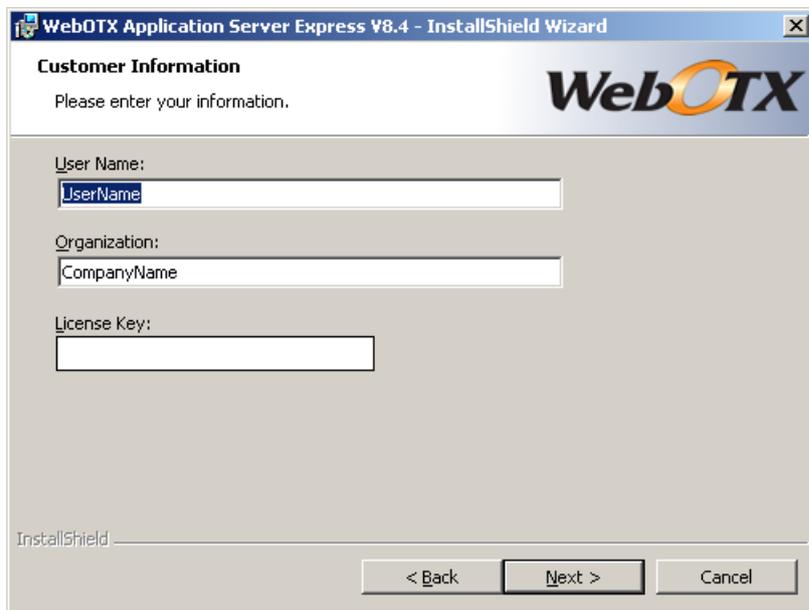
(3) **[Installed JDK Folder] dialog**

The [Installed JDK Folder] dialog appears. Select the folder for JDK (J2SE SDK) already installed on your PC, then click [Next].

If the environment variable for "**JAVA_HOME**" has been set, the path set for this variable will be shown.

If more than one JDK is installed, the folder for the most recently installed JDK will be shown.

Click [Change] if you want to select another folder for JDK installed.
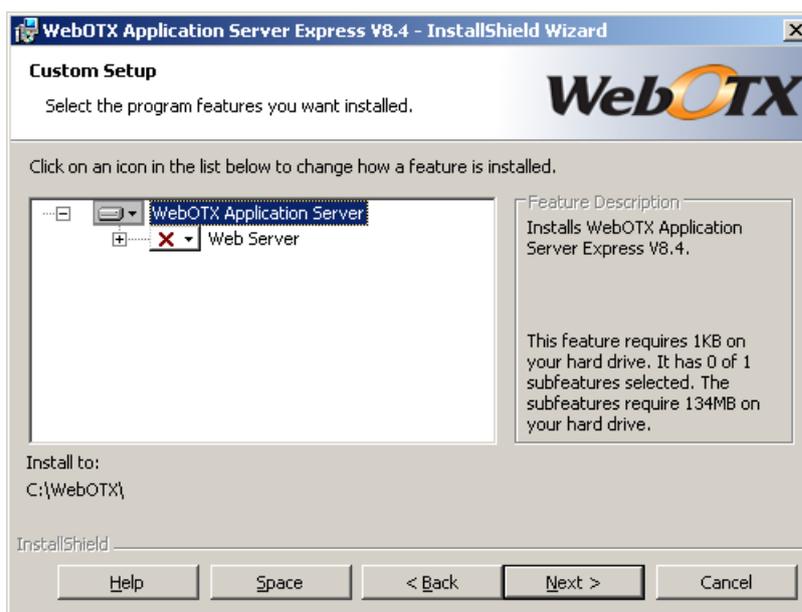

(4) **[Destination Folder] dialog**

The [Destination Folder] dialog appears. Confirm the destination folder and click [Next]. Click [Change] if you want to change the destination folder.

If other WebOTX products have been installed, select the same folder.
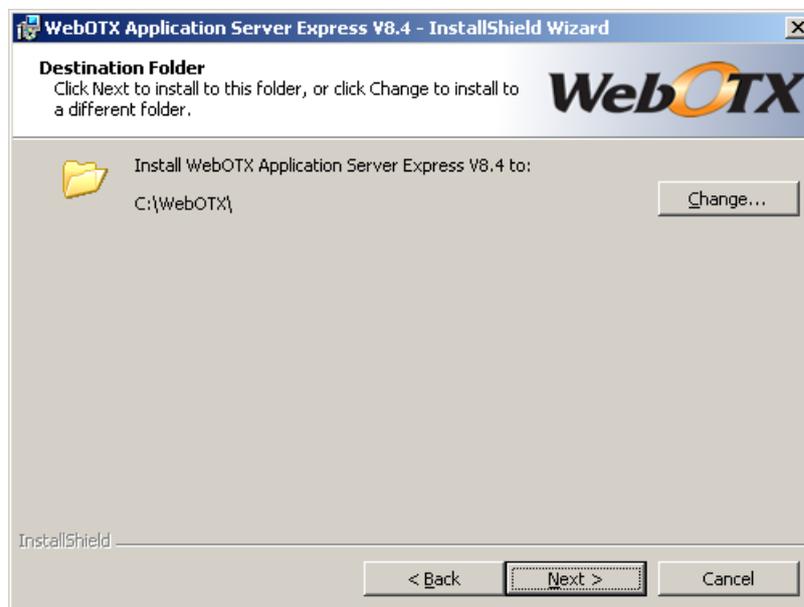
(5) **[Custom Setup] dialog**

The [Custom Setup] dialog appears. Select the features to install and click [Next].

The meanings of each icon in the list are explained below.

Icon	Description
Web Server	Installs the WebOTX Web server. This feature is not installed by default. (*1) The lower level icon allows you to select [Web Server 2.0] or [Web Server 2.2].
Web Server 2.0	Installs the Web Server (Apache HTTP Server 2.0.64 based). (*2)
Web Server 2.2	Installs the Web Server (Apache HTTP Server 2.2.17 based). (*2)

(*1) It is not necessary to select [WebOTX Server] from the installer if you will be using the Java based Web Server built into WebOTX, or if WebOTX AS will be linking to an external Web Server such as Microsoft Internet Information Service (IIS).

(*2) In this trial version, SSL (Secure Socket Layer) communication features are not installed. In commercial versions, the features are installed when you select [Web Server 2.0] or [Web Server 2.2].

(6) **[Create a user domain] dialog**

The [Create a user domain] dialog appears. Set whether to create a user domain or not, and then click [Next]. The default is to create an administration domain (WebOTXAdmin) and user domain.
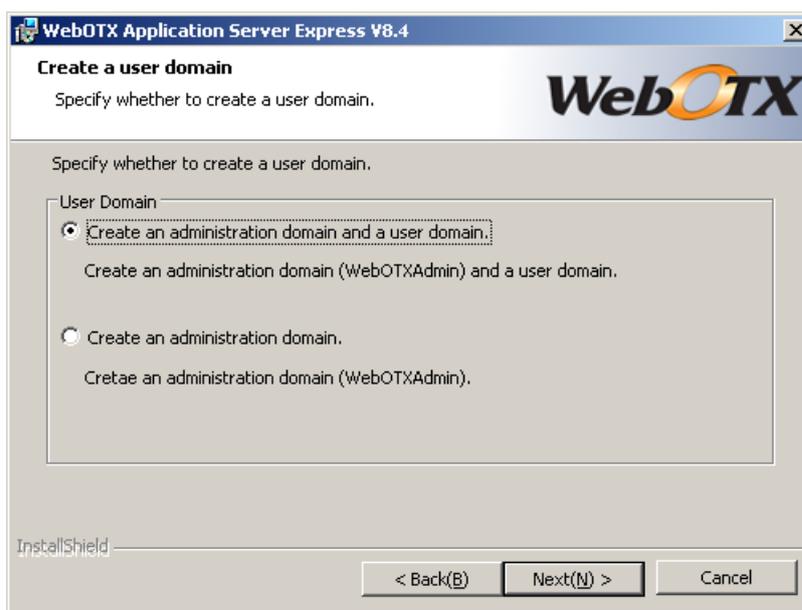
Icon	Description
Create an administration domain and user domain	Creates an administration domain (WebOTXAdmin) and user domain. The user domain information (domain user name, number of HTTP/HTTPS port), enter the next dialog.
Create an administration domain	Creates an administration domain (WebOTXAdmin) only. After installation, the user runs otxadmin.bat command to create a domain name.

(7) **[Setting of the user domain] dialog**

When [Create an administration domain and user domain] is selected, the [Setting of the user domain] dialog appears. Specify the domain user information (a domain name and numbers of HTTP/HTTPS port) and then click [Next].
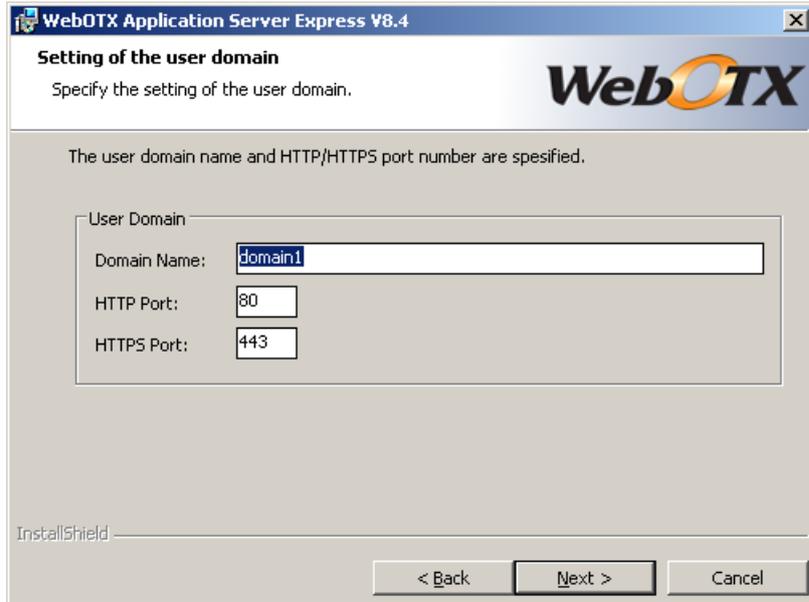
Icon	Description
Domain name	Specify the user domain name. The default value is domain1. Alphanumeric characters, hyphens (-) and underscores (_) are available for the user domain name. The user domain name must be up to 32 characters.
HTTP port	Specify the HTTP port number used in the user domain. The default value is 80. Make sure that this port number does not conflict with other port numbers used by other products.
HTTPS port	Specify the HTTPS port number used in the user domain. The default value is 443. Make sure that this port number does not conflict with other port numbers used by other products.

(8) [Ready to Install the Program] dialog

The [Ready to Install the Program] dialog appears. Click [Install].
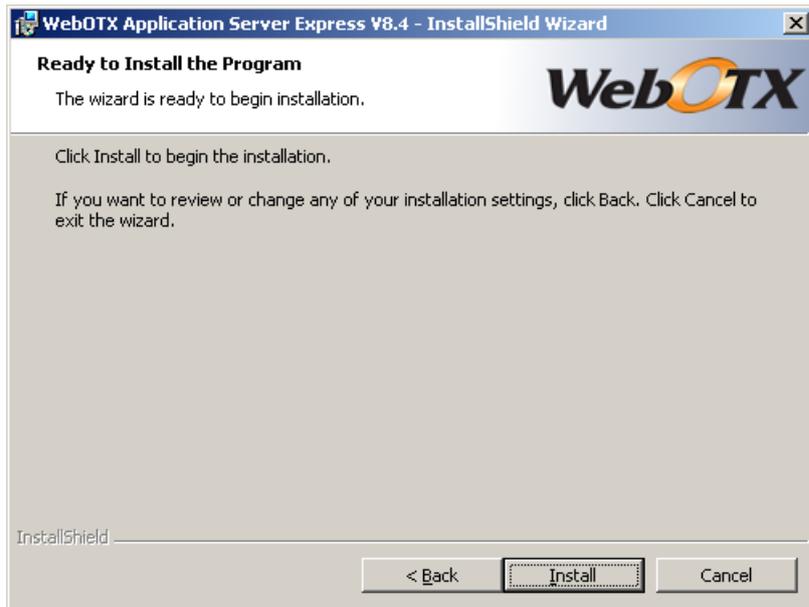
(9) **[Installing WebOTX Application Server Express V8.4] dialog**

The [Installing WebOTX Application Server Express V8.4] dialog appears and the installer starts copying files.

The time required for setup will vary depending on the features selected. Please wait until all files are copied.

(10) **[Building the WebOTX Application Server domains] dialog**

When all files have been copied, the following screen appears so that you can set the initial domain environment for WebOTX (WebOTXAdmin, domain1) with the Apache Ant command. Wait until the process in the screen completes. The execution results of Apache Ant can be viewed in the file <WebOTX_installation_folder>\ant_setup.log.

```
C:\WINDOWS\system32\cmd.exe                                    _ □ ×
Building the WebOTX Application Server domains.
It will take several minutes, before completing depending on the environment (st
ate) of a machine.
Please wait...
Buildfile: C:\WebOTX\setup.xml
_
```
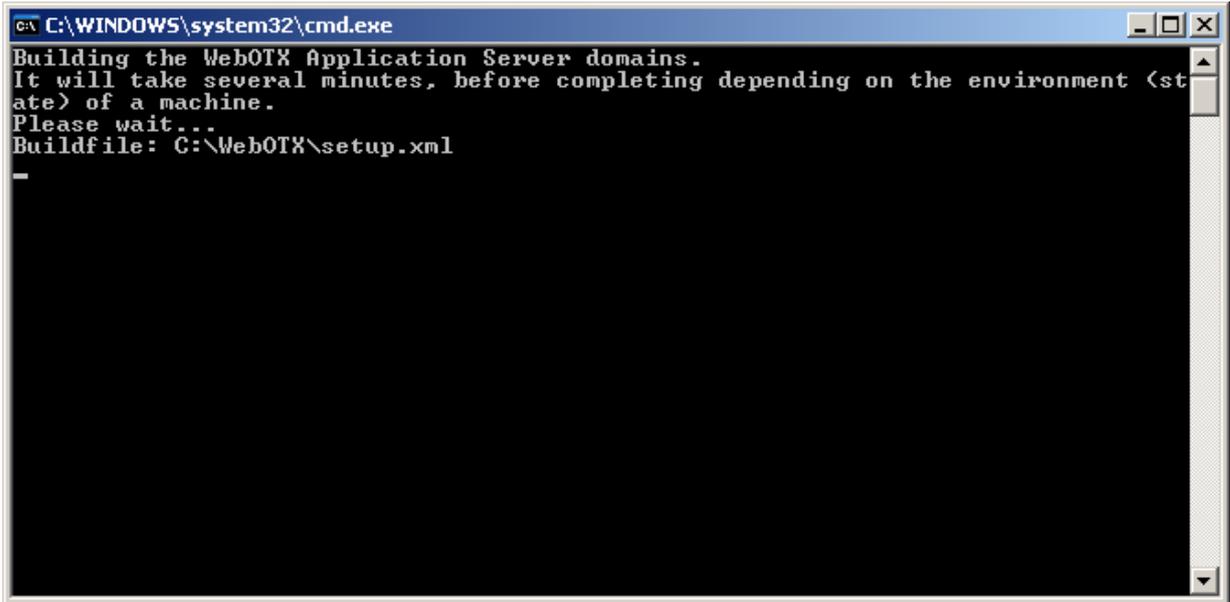
(11)   **[InstallShield Wizard Completed] dialog**

When the following screen appears, click [Finish]. The installation is completed.

WebOTX Application Server Express V8.4 - InstallShield Wizard

InstallShield Wizard Completed

The InstallShield Wizard has successfully installed WebOTX
Application Server Express V8.4. Click Finish to exit the
wizard.

< Back   Finish   Cancel
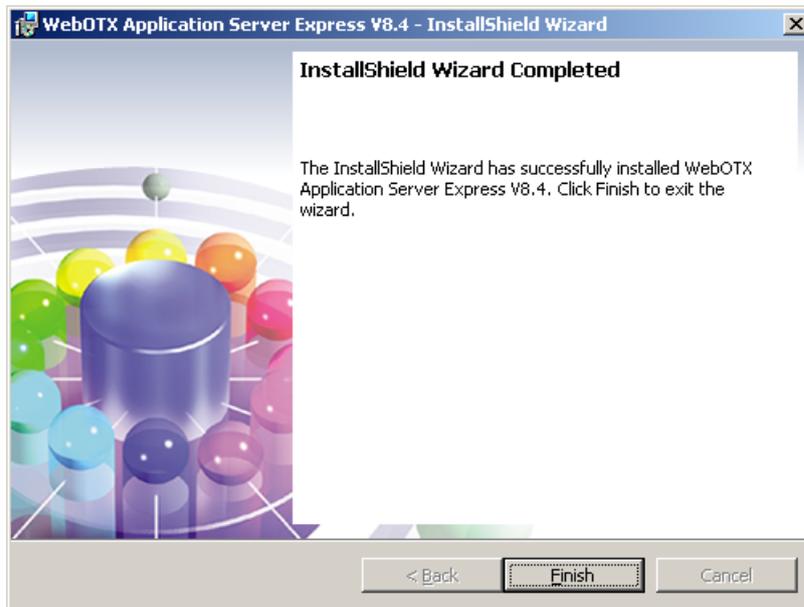
(12)   **Restart the PC**

After the installation completes, restart the PC.

Post-Installation

The WebOTX AS installer will register several WebOTX services in the OS during the setup process. These services will be set to start when the OS boots. This means that these WebOTX services will be active after you complete the installation setup process and restart the PC.

- Verifying the domains were created properly

    You can verify that the two domains named "WebOTXAdmin" and "domain1" were created properly during the setup process, by checking their operating status.

- Check that the service status is "Started".

    The status of the WebOTX service can be verified by opening the Service Manager. Check the status of these services.

    WebOTX AS Agent Service

    Verify the operating status of the WebOTX domain using the administration command "otxadmin"

    From the Windows [Start] menu, click [All Programs] - [WebOTX] - [Administration Command]. A prompt screen appears.
    At the prompt, type the command shown in bold letters below.

    > Use "exit" to exit and "help" for online help.
    > otxadmin> **list-domains**

    Verify the status of domain1 and WebOTXAdmin are both "running"

    > List of domains:
    > domain1 **running**
    > WebOTXAdmin **running**

    Type "exit" to end.

    > otxadmin> **exit**

Domain creation will fail if the port number used by WebOTX is also used by another program already running, or if the local host name (local computer name) does not comply with RFC 1034 (DNS).

If the domains were not created, stop the program already started or use the netstat command to resolve the duplicate port number, or rename the local host name in accordance with RFC 1034 (DNS) (use a combination

of alphabetic characters from A to z, "." and "-"). Then execute the following command to create the domains.

    <WebOTX_installation_folder>\ant_setup.bat

- Exclusion of port numbers used by WebOTX AS from the range of applicable temporary ports

    If the port numbers used by WebOTX AS coincide with the range of temporary ports assigned to the OS, problems such as the WebOTX failing to start will occur because the ports defined in the WebOTX AS service are already used by another application. Depending on the version of the OS you are using, note that different procedures.

    ▪ For Windows Server 2003

    In Windows Server 2003, the range of the temporary port is from 1024 to 5000. In this range, WebOTX uses name server port (2809) by default.

    The port numbers used by WebOTX can be excluded from the temporary port range by executing the following batch script.

    1. Select "Start"- "All Programs"- "Accessories"-"Command Prompt", and enter the following command:

        > **ReservPorts.bat install**
        Microsoft (R) Windows Script Host Version 5.6
        Copyright (C) Microsoft Corporation 1996-2001. All rights reserved.

        Add ReservPorts :[2809-2809]

        ReservPorts registered Succeed! Please reboot the machine.

        Note: Restart the OS to apply the settings.

    ▪ For Windows Server 2008

    In Windows Server 2008, the temporary port range can't be configured by ReservPorts.bat because of a change of specifications of Windows. When using Windows Server 2008, perform the following steps.

    When the temporary port range of OS is default value and the domain is also created by default value, the port number does not overlap.
    Therefore it isn't necessary to perform the following steps.

    1. Select "Start"- "All Programs"- "Accessories"-"Command Prompt", and enter following command.

        > netsh int ipv4 show dynamicport tcp
        > netsh int ipv4 show dynamicport udp

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2. Confirm the configured temporary port range from an execution result, and make sure that the port number used by the domain is not in the range.

Execution result example)
```
=====================================
Protocol tcp Dynamic Port Range
---------------------------------
Start Port          : 49152
Number of Port      : 16384
=====================================
```

In above case, the temporary port range is 49152-65536. Make sure that the port number used by the domain is not in this range.

3. When the port used by the domain is in the temporary port range in step 1, change the temporary port range. Execute following command, and adjust it so that the port used by the domain isn't included.

```
> netsh int ipv4 set dynamicport tcp start=XXXXX num=YYYYY
> netsh int ipv4 set dynamicport udp start=XXXXX num=YYYYY
```

Set the start port of temporary port in XXXXX and the number of ports used as temporary port in YYYYY.

● Checking the connectivity to the WebOTX from the Management Console

1. Check if the status of the services is "Started".
2. From Windows [Start] menu, click [Programs]-[WebOTX]-[Integrated Management Console]. A Web Browser window is displayed.
   (Note: Please user IE6/7/8 or Firefox2/3 for Web browser.)
3. Input [username: admin], [password: adminadmin] and push the [Login] button.
4. Login succeeds and welcome prompt is displayed.
5. You can logout by clicking "Logout" button in the upper-right corner of the prompt.

● Linking operations with the Web Server

(Scope: To link an external Web server with the Web container in WebOTX)

In WebOTX AS, for HTTP/HTTPS services, Web containers in the feature layer in which servlets and JSPs

run can work with Web server external to WebOTX. Supported Web servers are as follows:

- WebOTX Web Server
- Microsoft Internet Information Service
- Apache HTTP Server
- Oracle iPlanet Web Server

By using this cooperation, HTTP/HTTPS services can be made public on external Web server, and if HTTP has a context of servlet, external Web server redirects the request to the Web container within the WebOTX AS. The request is handled by the Web container.

If you want to prepare this configuration, you need to configure interface between Web container and Web Server.

Please note that the procedures described here may change depending on the Web server specified on the [Custom Setup] dialog during the installation.

1. If no Web server was selected
   You can either use the Java-based Web server built-into WebOTX, or link the Web container to a Web server other than the WebOTX Web server.

   No action is necessary if you are using the Java-based Web server built into WebOTX.
   Proceed to the next step.

   Action is necessary if the Web container is to be linked to a Web server product other than the WebOTX Web server.

2. If you selected the WebOTX Web server
   This involves linking the Web container with the WebOTX Web Server included with the WebOTX product.

   In this case, no action is necessary because the link settings are made automatically during the setup process.
   Proceed to the next step.

   If the Web server and the Web container work on the different host, proceed to the [Stop the Server], and configure.

The rest of this section will explain the procedures for linking a Web server product other than the WebOTX Web server to the Web container.

a. Configuration for external Web Server to coordinate to WebOTX domains

If you did not select the WebOTX Web Server, in default, internal Web Server has set. Here, we describe how to change the Web Server you use from internal one to external one.

1. Start the operation administration command.

Click [Start] - [Programs] - [WebOTX] and invoke [Administration Command]. Then log in first.

otxadmin> login --user admin --password adminadmin

2. Check the configuration of Web Server.

Execute the command as follows.

otxadmin> get server.http-service.virtual-server.server.http-listeners

The following results mean that the internal Web Server has set, so you need to follow a procedure.

server.http-service.virtual-server.server.http-listeners
= http-listener-1,http-listener-2,ajp-listener-1

The following results mean that the external Web Server has set, proceed to the [b. Stopping Domain and External Web server].

server.http-service.virtual-server.server.http-listeners = ajp-listener-1

If you have some domains to need this configuration, you must follow the procedure,[Configuration for external Web Server to coordinate to WebOTX domains], for each domain.

3. Execute the following command to check the target domain is running.

otxadmin> list-domains

The domain stopping, execute the command as follows to start it.

otxadmin> start-domain <domain-name>

4. Change the configuration for a domain.

Execute the following command to change the Web Server to use from the WebOTX's built-in Java-based Web Server to the external Web Server.

otxadmin> login --user admin --password adminadmin --port 6212
otxadmin> set server.http-service.virtual-server.server.http-listeners="ajp-listener-1"
otxadmin> logout
otxadmin> exit

b. Stop the domain and external Web Server

The above configuration is enabled when you restart the WebOTX services.

1. First, execute the following command to stop the target domain.

    WebOTX AS Agent Service

    Execute the following command.

    otxadmin> login --user admin --password adminadmin --port 6212
    otxadmin> stop-domain <domain name>
    otxadmin> logout
    otxadmin> exit

2. Second, stop the external Web Server that you want to coordinate to the domain.

c.   Task before setting to external Web Server to coordinate to WebOTX.

Using Sun Java System Web Server (Oracle iPlanet Web Server), you have to disable the Servlet/JSP Container where Sun Java System Web Server (Oracle iPlanet Web Server) works. Refer to the manual of Sun Java System Web Server (Oracle iPlanet Web Server).

After disabling the Servlet/JSP Container, you delete (or comment out) the following lines from the configuration file of the Web Server.

[Using Sun Java System Web Server (Oracle iPlanet Web Server) 6.1]
    <Object name="servlet">
    ObjectType fn="force-type" type="text/html"
    Service fn="NSServletService"
    </Object>

[Using Sun Java System Web Server (Oracle iPlanet Web Server) 7.0]
    <Object name="j2ee">
    Service fn="service-j2ee" method="*"
    </Object>

After changing the configuration of external Web Server, if you refresh the configuration of Web Server by administrator, the comment which means the connecting information of Web Container may be lost. Once this information has been lost, you can not refresh the setting of Web Container. You should backup the configuration file of the Web Server. If you lost the configuration files without backup, refer to [Cautions > 3. Web Container > 3.1. Cautions of Web Container] [What you must do before setting a linkage with Sun Java

System Web Server (Oracle iPlanet Web Server)].

- In case the Web Server and the Web Container work on the different host.

  In case the Web Server and the Web Container work on the same host, it is not necessary to work about the following. Proceed to the "d. Setting for coordinating to WebOTX Web Server".

  Following sections describe the case the Web Server and the Web Container work on the different host.

  [Using the WebOTX Web Server]

  When you install the WebOTX Web Server, the license of WebOTX is needed. Before installing the WebOTX, you have to install the WebOTX Web Server.

  [Using the IIS]

  For getting the plug-in for IIS, you have to install the WebOTX to the host where IIS works.
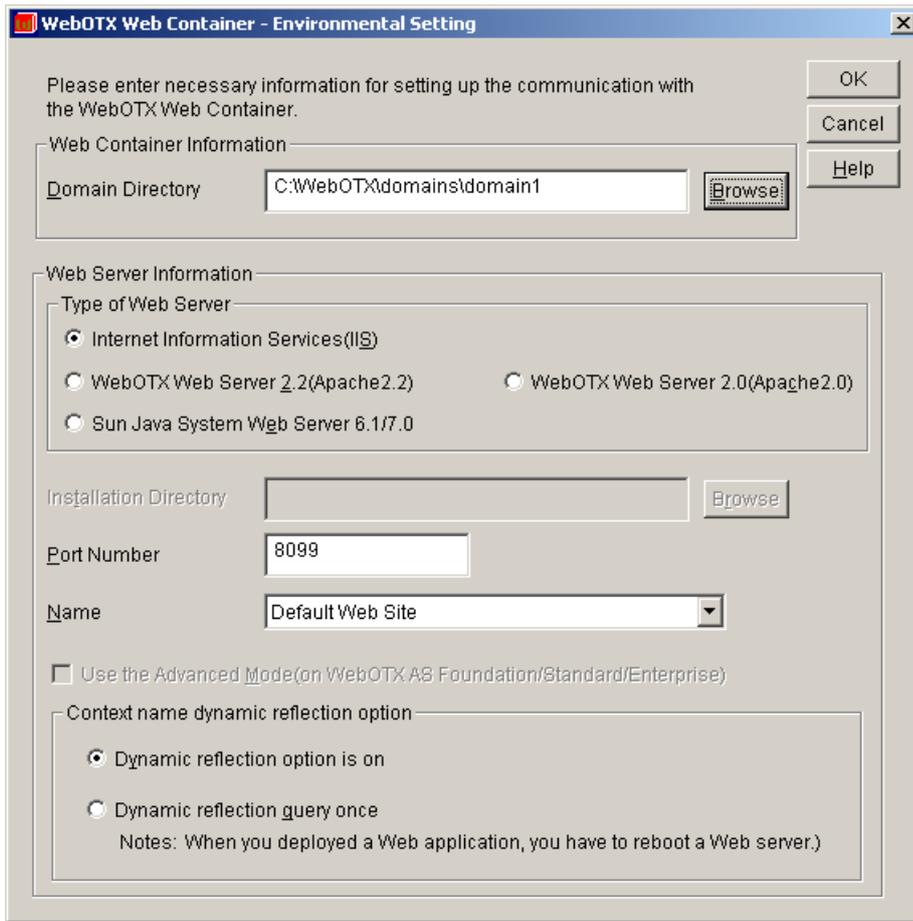
d. Setting for coordinating to WebOTX Web Server

To cooperate with IIS7, Role Services "ISAPI Extensions" and "ISAPI Filters" of Web server(IIS) must be installed. To make coordination using Environment Setting Tools, Role Services [IIS 6 Metabase Compatibility] must also be installed. If not installed, install them as follows.

1. Start [Manage Your Server] from [Start] - [All Programs] - [Administrative Tools].

2. Select [Manage Your Server] - [Roles] - [Web Server(IIS)] in the left window.

3. Install appropriate role Services using [Summary]-[Role Services]-[Add Role Services] in the right window.

Then, with the server stopped, define that the external Web server be integrated with WebOTX. This can be performed from the GUI tool.

Select "Start"-"All Programs"-"WebOTX"-"Environment Setting Tool" menu to start the tool. Enter information in the screen of the configuration tool to configure the integration of Web container and Web server. If there are multiple domains, perform the setting for each domain.

Setting		Description
Web Container Information	Domain Directory	Specify the domain of the Web container to link with the Web server. **e.g.) C:\WebOTX\domains\domain1**
Web Server Information	Types	Specify the type of Web server to be linked with the Web container. The default is [Internet Information Services (IIS)]. Select [WebOTX Web Server 2.0 (Apache2.0)] if you are using Apache HTTP Server 2.0.64 or later, or WebOTX Web Server 2.0; Select [WebOTX Web Server 2.2 (Apache2.2)] if you are using Apache HTTP Server 2.2.15 or later, or WebOTX Web Server 2.2; Select [Sun Java System Web Server 6.1/7.0] (Oracle iPlanet Web Server) if you are using Sun Java System Web Server (Oracle iPlanet Web Server) 6.1/7.0.

	Installation directory	Specify the installation directory of the Web server to link with the Web container. Leave this field blank if you selected [Internet Information Services (IIS)]. Select <WebOTX_installation_folder>\WebServer2 if you selected [WebOTX Web Server 2.0 (Apache2.0)]. Select <WebOTX_installation_folder>\WebServer22 if you selected [WebOTX Web Server 2.2 (Apache2.2)]. **e.g.) C:\WebOTX\WebServer2**
	Linking Port Number	Specify the port number to use for linking the Web container and the Web server. The default value for domain1 is "8099".
	Name	When using Sun Java System Web Server (Oracle iPlanet Web Server) 6.1/7.0, specify the "ServerName" specified when building multiple internal Web servers. When using IIS, specify the "Web Site Identifier".
	Use the Advanced Mode (on WebOTX AS Foundation/Standard/Enterprise)	Check this option if you are using a Web container that runs on the TP Monitor on the WebOTX AS Foundation/Standard/Enterprise. (*) Since this product is the WebOTX AS Express, a check is unnecessary.
	Dynamic context name reflection option for Web applications	Select the dynamic context name reflection option for Web applications. If you select "Use dynamic reflection (conventional)", dynamic reflection is always in effect. Dynamic reflection is a function that dynamically reflects the context name to the Web server by sending a context query to the Web container when a request is made for a newly deployed context. If you select [Dynamically reflect once (only at Web server startup)], the context name is reflected only once when the Web server starts up.

Clicking [OK] reflects these settings to all Web container definition files and Web server setting files. Click [Cancel] to exit the tool without reflecting changes.

e.   When the Web Server on another machine is used by Web Container

If the machine on which Web container runs and the machine on which Web server runs are different, configuration file "workers.properties" which is in "${INSTANCE_ROOT}\config\WebCont" folder of the machine where Web server runs. Since this file is initialized by running "Environment Setting Tool", following modification should be done after using "Environment Setting Tool". Modify following items if necessary.

worker.ajp13.port=<Cooperation port number**>**
worker.ajp13.host=<Address of cooperating domain's host**>**

If "Dynamic reflection option" is set to "off" in this configuration, manual modification is necessary for each subsequent deployment.

f.   IIS basic authentication configuration

If coordinated with IIS, login to the Web application which performs authentication will fail without IIS basic authentication configuration. Configure it as follows.

(1). Enable "Basic authentication"

Execute "IIS Manager" and open the property of associating Web site. From "Directory Security"-"Authentication and access control", press [Edit] button to display "Authentication Methods" dialog. In "Authentication Methods" dialog, disable "Integrated Windows authentication" and enable "Basic authentication".

*If "Enable anonymous access" is not checked, authentication when accessing IIS is mandated, so that authentication when accessing Web applications also mandated. Log in as one of the user registered to the Windows system in authentication windows.

(2). Create or modify account information

To use "Basic authentication" in IIS, user must be registered in Windows system. Perform one of the following.

• Register the user to Windows system for authentication in Web container. User name and its

password are the same as specified during domain creation.

- Set "domain administrator" system login user. Set user name and its password of domain administrator to the same as system login user's ones.

g. Setting the Web Service Extensions for IIS

To coordinate with IIS6.0 or IIS7.0, you need following configuration.

・ For IIS6.0

Select "Web Service Extensions" in left tree in "IIS Manager". If so, the status of Web service extensions will be shown in right window, press "Add a new Web service extensions..." to open "New Web Service Extension" window.

In "New Web Service Extension" window, specify "ISAPI module for Web Container" for "Extension name" and press add button. Then, specify "${INSTALL}\bin\win32\i386\isapi_redirect.dll" as "Required files". After that, check "Set extension status to Allow" and press "OK".

・ For IIS7.0

Open "IIS Manager", select virtual directory "webcont" from [Sites]-[<Coordinated Web site >]. Double click on [Handler Mappings]of [webcont Home]. Select [Add Script Map] from right window of [Handler Mappings], to open [Add Script Map] window. Specify [*.dll] in [Request Path]. Type "${INSTALL}\bin\win32\i386\isapi_redirect.dll" in [Executable], "ISAPI module for Web container" in [name] and press "OK".

[Add Script Map] dialog appears and asked that [Do you want to allow this ISAPI extension?]. Then, select "Yes" and to add [ISAPI and CGI Restrictions]

h. Restarting the PC

Restart the PC to make the above settings take effect.

● Registration of a shutdown script

If operating system is shutdown while WebOTX is running, WebOTX Application Server processes are automatically killed by operating system to produce following warning message to the event log.

OTX01205161: The shutdown request of the application server was done from the internal system by an unexpected event.(com.nec.webotx.enterprise.system.core)

To eliminate this issue, register shutdown script as follows.

1. Create a script

    Create a script named "woShutdown.bat" which contains following one line command and place it **C:\WINDOWS\system32\GroupPolicy\Machine\Scripts\Shutdown** or the proper folder where unintended deletion will never occur depending on the environment.
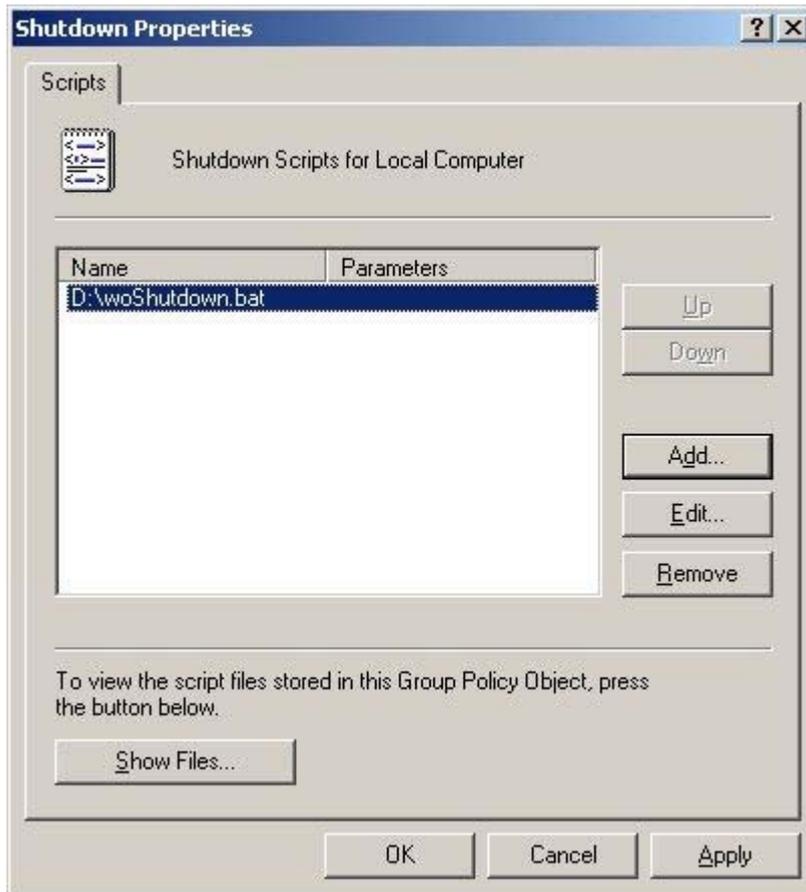
    net stop WebOTXAgentService

2. Execute "gpedit.msc" from [Run…

3. Browse [Local Computer Policy]-[Computer Configuration]-[Windows Settings]-[Scripts (Startup/Shutdown)] in left tree of "Group Policy", select "Properties" in "Shutdown" right click menu of right window.
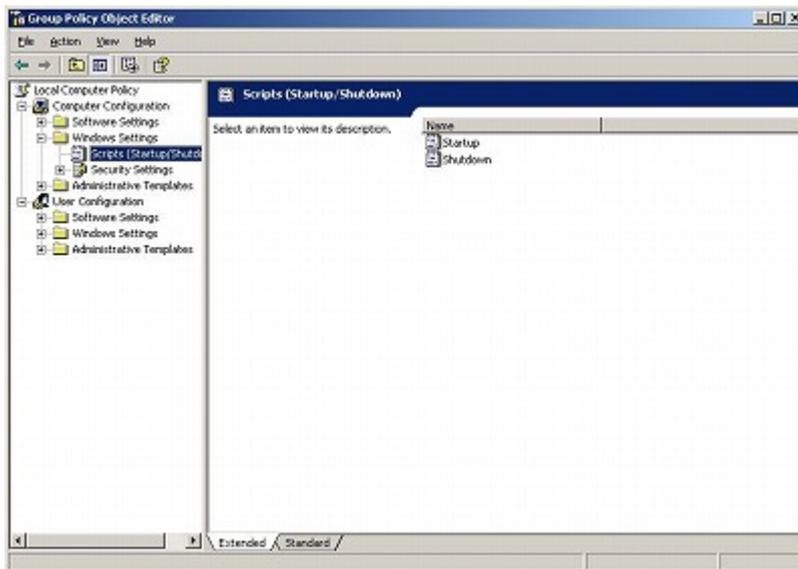
4. Register the shutdown script through adding "Shutdown property".

5. Press "OK" button to close the window.

● __Preparatory tasks for database use (Java)__

Perform the following tasks for the database to be used. For details, refer to the Reference manual for each database.

● Tasks to complete in Oracle

- In order to use the transaction recovery function, users must have SELECT privileges on the DBA_PENDING_TRANSACTIONS view. When registering JDBC resources, specify user(s) that have SELECT privileges. If you are not going to register JDBC resources, grant SELECT privileges to all users specified in the JDBC database definition used when executing transactions.
- Set the initialization parameter for Oracle, DISTRIBUTED_TRANSACTIONS to the number of global transactions to be executed at the same time. The default is 5. Make sure this parameter value does not exceed the TRANSACTIONS parameter. Note, the TRANSACTIONS parameter changes based on the values of the PROCESSES and SESSIONS parameters.
- To use the OCI JDBC driver on UNIX, you must first set the environment variables for Oracle. For details, see item "6. JDBC Data sources" under "Notes and Restrictions".
- If the [useDatabaseCluster] parameter in the JDBC data source setting is set to true, or if you are using

Oracle Database 10g Release 2 or later, grant EXECUTE privileges for the sys.dbms_system package to the user account.

- Tasks to complete in Sybase Adaptive Server Enterprise

  - Install the Sybase Adaptive Server Enterprise DTM option license.
  - Use the sp_configure command to change the enable dtm parameter from 0 to 1 (on).
  - Use the sp_configure command to change the dtm detach timeout period parameter from 0 to a constant value (i.e., a value greater than the transaction timeout value). Failure to change this value will result in transactions remaining without being recovered for many hours.
  - Grant all users that participate in transactions with dtm_tm_role privileges.

- Tasks to complete in Microsoft SQL Server

  - In order to use the transaction recovery function in SQL Server 2000, users must have sysadmin privileges. When registering JDBC resources, specify user(s) that have sysadmin privileges. If you are not going to register JDBC resources, grant sysadmin privileges to all users specified in the JDBC database definition used when executing transactions.
  - To use SQL Server 2005, users must have SqlJDBCXAUser roll privileges. Grant SqlJDBCXAUser rolls privileges to all users specified in the JDBC database definition used when executing transactions.
  - If Microsoft SQL Server is restarted while a pending transaction exists, the Transaction service cannot connect to the database, and the pending transaction cannot be recovered. Keep the database the Transaction service connects to separate from the database the application connects to. For example, set the database used for recovery by the Transaction service as master, and the database used by the application as pubs.
  - When using SQL Server 2000, install the JDBC XA Procedures for SQL Server 2000 Driver for JDBC. When using SQL Server 2005 JDBC Driver or SQL Server JDBC Driver 2.0, install the MS DTC interface (sqljdbc_xa.dll and xa_intall.sq) for SQL Server 2005. The SQL Server JDBC Driver 2.0, SQL Server 2000, SQL Server 2005, can be connected to any of the SQL Server 2008.

- <u>Confirming the remaining period for using the trial version</u>

You can confirm the remaining period for using the trial version by executing the following commands.

> CD <WebOTX installed folder>\share\bin
> OTXLLmt.exe 2
The time limit of Trial-License is *xxx* days.

The remaining days of your trial license are shown in ***xxx***. If this value becomes 0, or if **"No License."** is shown by executing the commands, it means that the period of your trial license runs over and becomes invalid.
In this case, uninstall the product of the trial version or upgrade it to a commercial version.

3. Uninstallation Procedures

Pre-Uninstallation

(1) Check for pending transactions

When using Transaction services, make sure all transactions are completed by checking the Administration Tools or by using administration commands. Complete all pending transactions. For details, see the online manual "Domain Construction and Basic Settings Guide".

(2) Stop any WebOTX applications that may be running.

(3) Stop the Web server

If IIS or any other external Web Server is in use, stop it. For stopping procedures, refer to the manual for your Web server.

(4) Stop the WebOTX services

Stop all WebOTX services. Log in with Administrator privileges and use "Service Manager" on the "Control Panel" to stop the following services if they are running.

WebOTX AS Agent Service

Uninstalling WebOTX Application Server Express Trial Version

(1) Start the uninstallation process

Select "WebOTX Application Server Express" from [Add or Remove Programs] in the Control Panel, and then click [Change].
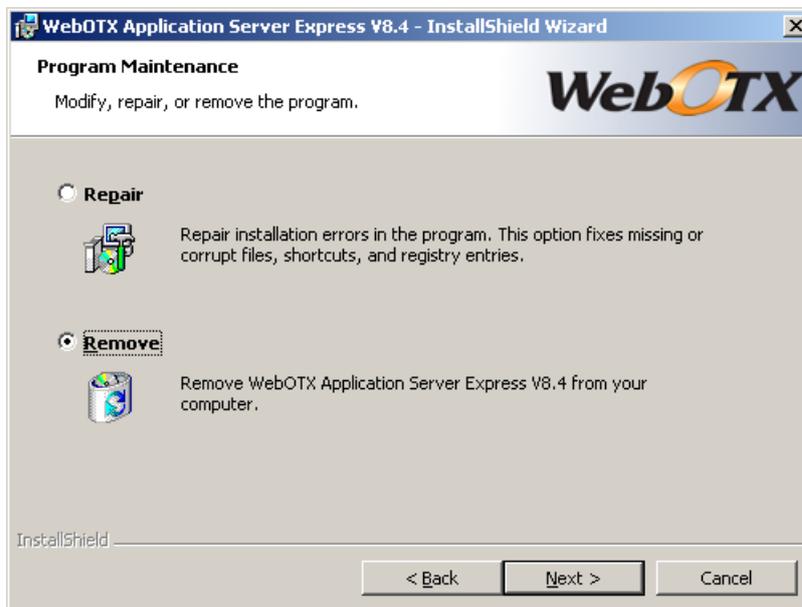
(2) [Maintenance for WebOTX Application Server Express] dialog

The InstallShield installer will launch and display the message "Preparing to install...", followed by this dialog. Click [Next].
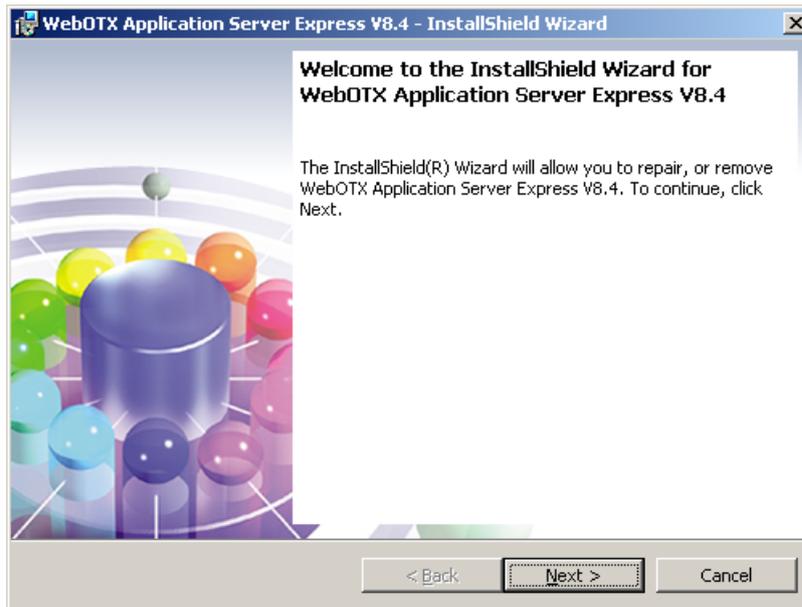
**(3) [Program Maintenance] dialog**

The [Program Maintenance] dialog appears. Select [Remove] to uninstall, and click [Next]. If you want to repair the program, select [Repair] and click [Next].

(4) [Remove Option] dialog

The [Remove Option] dialog appears. To remove definition information, place a check in [Remove configuration files] and click [Next].

If other WebOTX products are still installed, or to retain the definition information (domain information) after the uninstallation, leave the box unchecked and click [Next].
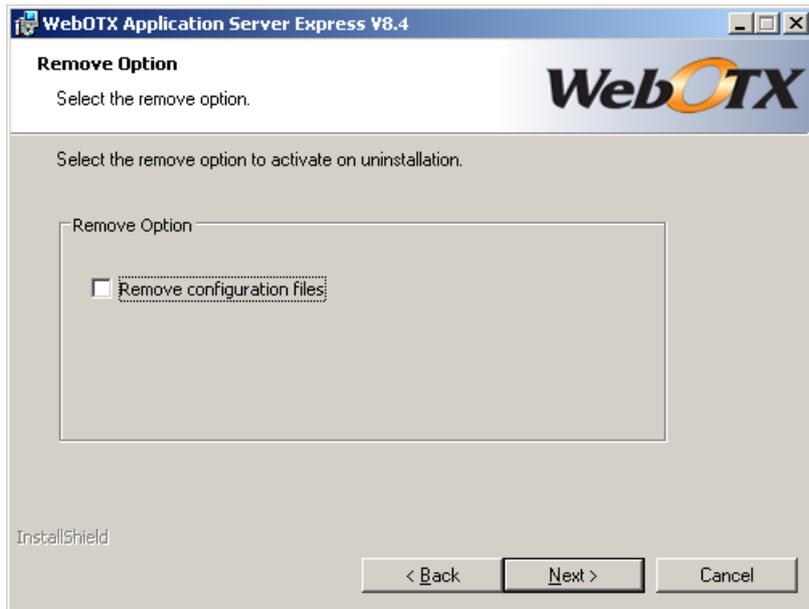
Do not check the [Remove configuration files] option if any other WebOTX product besides this Express is installed on this PC.

Directories and files may still exist in the installation folder even if you select the [Remove configuration files]. Remove all remaining files after the uninstallation is complete.

(5) [Remove the Program] dialog

The [Remove the Program] dialog appears. Click [Remove] to start removing files.
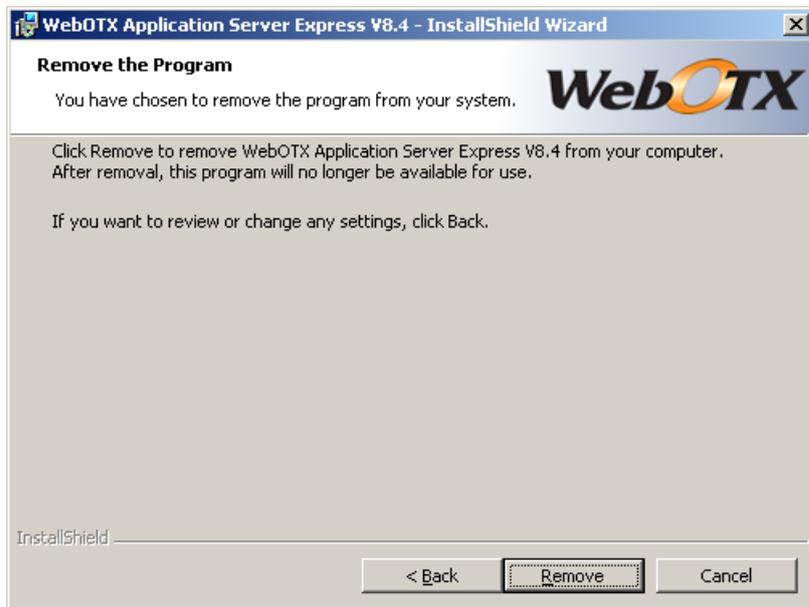
(6) [Uninstalling WebOTX Web Application Server Express] dialog

The [Uninstalling WebOTX Web Application Server Express] dialog appears and file removal begins. Please wait as this may take several minutes.

(7) [InstallShield Wizard Completed] dialog

The uninstallation process is complete when the following dialog appears. Click [Finish].
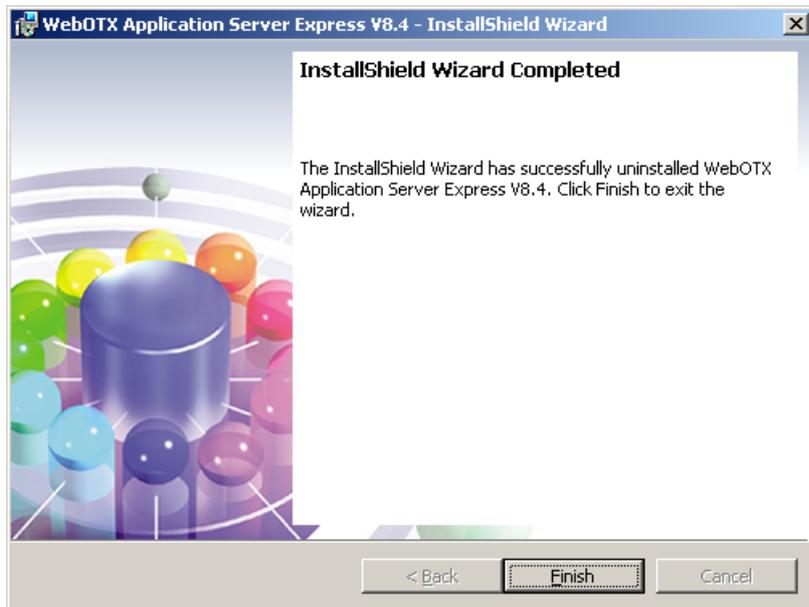
(8) Restart the PC

When the uninstallation completes, restart the PC.

4. Installing Other Items

Online Manuals

The WebOTX online manuals contain useful information ranging from product installation to setup, development, and operation.

While the commercial versions of WebOTX include online manuals, the trial version does not include them. The online manuals are available from the following.

Title	Description
WebOTX online manuals V8.4 (1st version)	This file is an installer of WebOTX (commercial version) manuals. It is also available when you are using the trial version.
	Download this file from the download site of WebOTX.
	Filename: **otxman_V84E_01.exe**

5. Notes and Restrictions

- Restarting the PC
  After installation is complete, be sure to restart the PC before operating this product. This product will not operate properly unless the PC is restarted.

- The user uninstalling this product must be a member of the Administrators group and have Administrator privileges.

- Uninstallation for environments with multiple WebOTX products
  If other WebOTX products are installed in addition to this product, do not select the [Remove definition information] option if only one of those products will be uninstalled.

- Directories and files may still exist in the installation folder even if you select the [Remove definition information]. Remove all remaining files after the uninstallation completes.

- If you choose the "Delete" button of "Control Panel" - "Add or Remove Programs" in Windows Server 2003 (R2) or "Uninstall" button of "Control Panel" - "Programs and Features" in Windows Server 2008, uninstallation will be started without displaying the above-mentioned page. In this case, definition information is not deleted.

- After starting the WebOTX, if you do the operation by use administration tool or administration commands, the following WARN messages might be output to the log.

  WARN   com.nec.webotx.enterprise.system.util - webotx.failed_to_backup [main]
  com.nec.webotx.enterprise.util.ExecException: ~

  Because the configuration file had been updated in the automatic backup, the backup processing was canceled. There is no influence on operation. The backup will be done at the time of next restart.

- The following warning message might be output to the "domains/WebOTXAdmin/logs/webotx_agent.log" log file of the WebOTX installation directory during the domain generation at the time of the installation.

  WARN   com.nec.webotx.enterprise.system.tools.admin - Could not create JMXRemoteConnector.
  WARN   com.nec.webotx.enterprise.system.tools.admin - Could not get JMXConnector

  Though some message are outputted because communication of the JMX connection inside of WebOTX is failed, a domain can be constructed normally. Therefore, this message doesn't appear in the domain start from next time. It hasn't any influences. Please ignore this message.
  Furthermore, this phenomenon is confirmed only in Windows Server 2008 used Hyper-V and Windows Server 2003 guest OS.

- WebOTX AS Express Trial Version can be used for 365 days after installation. When 365 days have passed, it

becomes impossible to start WebOTX AS.

- WebOTX AS Express Trial Version does not provide SSL (HTTPS) communication features in WebOTX Web Server (Apache HTTP Server based).
  If you want to use SSL (HTTPS) communication features, you must use Java-based built-in Web server or an external Web server such as IIS.
  If you want to use SSL (HTTPS) communication features in WebOTX Web Server, please use the commercial version of WebOTX AS Express.