

FUJITSU Software WebTransactions for openUTM (BS2000)

Version 7.5B
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Release Notice

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1 General

- *B This Release Notice is a summary of the major extensions, dependencies and operating information with respect to WebTransactions for openUTM (BS2000) 7.5B under the BS2000 operating system in POSIX.

You can use WebTransactions for openUTM to link existing openUTM applications into the World Wide Web (WWW). You also have the option of retaining existing masks after conversion or optimizing the user interface and dialog sequence of your application for the WWW by programming HTML templates. You can also create a new HTML user interface for new applications to allow the user to control the application and data output with a WWW browser.

WebTransactions is also suitable for client/server applications, acting as the link between the server application and the client browser. With the functions for dialog reengineering, dialog sequences can be combined or separated and therefore restructured more ergonomically without having to modify the logic or the data structures of the underlying host application.

The user friendly development environment WebLab is at your disposal for all development steps.

- *B The release level is that of: December 2014.
- *B Changes to WebTransactions for openUTM (BS2000) 7.5A from August 2010 are marked with *B.

This and other current Release Notices are shipped on the SoftBooks DVD and are available online at <http://manuals.ts.fujitsu.com>

If one or more previous versions are skipped when this product version is used, the information from the Release Notices (and README files) of the previous versions must also be noted.

1.1 Ordering

- *B WebTransactions for openUTM (BS2000) 7.5B can be ordered from your local distributors and is subject to the general terms and conditions of the software product use and support agreement.

A license is required for WebTransactions for openUTM (BS2000). Appropriate licenses must be ordered and installed in order to use the product.

1.2 Delivery

- *B The WebTransactions openUTM (BS2000) V7.5B files are delivered via SOLIS.

The following delivery components are required regardless of the HSI:	
SINLIB.WEBTRANS-UTM.075	Library for installation in POSIX
SYSFGM.WEBTRANS-UTM.075.D	Release Notice (German)
SYSFGM.WEBTRANS-UTM.075.E	Release Notice (English)
SYSSII.WEBTRANS-UTM.075	IMON structure and installation Information

The current file and volume characteristics are listed in the SOLIS2 delivery cover letter.

1.3 Documentation

The following documentation is available for openUTM (BS2000) V7.5:

- WebTransactions V7.5, Concepts and Functions
- WebTransactions V7.5, Template Language
- WebTransactions V7.5, Connection to openUTM Applications via UPIC

Additional manuals for WebTransactions V7.5:

- WebTransactions V7.5, Access to Dynamic Web Contents
- WebTransactions V7.5, Client-APIs for WebTransactions
- WebTransactions V7.5, Web-Frontend for Web Services

The documentation this and other Release Notices are also available in the form of online manuals at <http://manuals.ts.fujitsu.com> or can be ordered at extra cost at <http://manualshop.ts.fujitsu.com>. In the manual shop only manuals are available for products which are still orderable.

The BS2000 documentation is also available in German and English on DVD with the title BS2000 SoftBooks.

The manuals may be supplemented with readme files. These contain changes and extensions to the manual of the product concerned.

2 Software extensions

Only the extensions and improvements over the previous version WebTransactions for openUTM (BS2000) V7.1A are described in the following section.

2.1 Template language

Global functions:

- New function copyFile()
- New function isRequestWaiting()
- New parameter all in listFolder()
- New function moveFile()

Built-in classes and methods:

- Changes in the output of the method toString() at objects and arrays: Improved serialisation / deserialisation
- New static method String.fromCharCode()
- New method string.charCodeAtAt()
- New method WT_Filter.dataObjectToFormattedXML()

Exceptions:

- New attributes strLine, strColumn and strText at the exception object

C/C++ user exits:

- New argument in SendMail()

(Manual reference: WebTransactions V7.5, Template Language)

2.2 Host adapter

Host adapter HTML

- New system object attribute METHOD

(Manual reference: WebTransactions V7.5, Access to Dynamic Web Contents)

2.3 Error corrections

- *B - Fixed problem when setTimeout() script method produced WTHolder crash

3 Technical information

3.1 Resource requirements

The completely installed product requires about 150 PAM pages in BS2000 and approx. 30 MB of disk space in the POSIX file system.
The required main memory is about 64 MB and additionally 6.5 MB per concurrent user.

3.2 Software configuration

*B WebTransactions for openUTM (BS2000) V7.5B will run with:

- BS2000 as of V18.0, i.e. OSD/BC as of V9.0 or OSD/XC as of V9.0 respectively
- POSIX-BC with POSIX-SH (delivered with BS2000)

*B

- WebTransactions for OSD (BS2000) V7.5B (delivered with BS2000)
- ONETSERV as of V3.3
- APACHE as of V2.2

For automatic mask conversion:

- IFG V8.3A

For individual user exits:

- openUTM (BS2000)
- C-Compiler (Shell Level 2)

For Java integration (optional):

- JENV as of V6.0 (delivered with BS2000)

Requirements concerning the application to be linked in:

- The application must run under openUTM as of V6.1

3.3 Product installation

Installation is described in chapter 2 of manual "Connection to openUTM Applications via UPIC"

The products APACHE (BS2000), APACHE:htpd (BS2000), JENV (BS2000) and WebTransactions for OSD (BS2000) have to be installed in POSIX in advance. Please refer to the corresponding release notes for more detailed information.

*B The installation of the product WebTransactions for openUTM (BS2000) V7.5B with the installation monitor IMON is mandatory. You must follow the information concerning installation in the delivery cover letter and in the product documentation.

The necessary inputs and the sequence of the installation are described in the IMON documentation.

After successful installation of the product with IMON you have to carry out the following actions:

- POSIX-Installation of WebTransactions for openUTM
You have to install under the administrator account TSOS with the POSIX installation tool POSINST, call:
/START-POSIX-INSTALLATION
Product: WEBTRANS-UTM
The suggested directory of installation /opt/WebTrans must not be changed.

3.3.1 General notes

WebLab:

*B The file WebLab75.msi is stored in subdirectory webtav75 in the document root directory of the Web-Server. WebLab can be installed on any Windows client (as of Windows Server 2008 or Windows 7) after download via web browser. The download is available at [http://<server>\[:server-port\]/webtav75](http://<server>[:server-port]/webtav75)

Ordering the activation key:

A license key is required in order to set up the licenses. Start the WebTransactions Administration, select Licenses and follow the instructions.

3.3.2 Notes on Web-Server

The WWW server used for WebTransactions applications needs write access right to the installation folder of WebTransactions, the subdirectory webtav75 in the document root areas of the WWW server and to all base directories which should be created.

Using Apache servers "Options Indexes FollowSymLinks" must be set for document root area of the WWW server.

3.3.3 Notes on deinstallation

All files within the document root area of the WWW server (e.g. /opt/apache22/htdocs) are retained during deinstallation of Web-Transactions for openUTM (BS2000).

*B Some directories in /opt/WebTrans/7.5 are not deleted, the directories are not empty, they contain files of WebTransactions for OSD(BS2000).

The deinstallation of WebTransactions for OSD (BS2000) via POSINST removes the main module of WebTransactions. Therefore, the product WebTransactions for openUTM (BS2000) is not usable anymore.

All administration settings are retained during deinstallation. This concerns the files within <install>/config/wtaccess (containing administration data for managing identification, access and applications) as well as all files for cluster <install>/config/cluster/*.

If necessary delete these files after the deinstallation.

3.4 Product use

WebTransactions for openUTM cannot be used for applications which work with FHS-DE (Dialog Extension). Please use WebTransactions for OSD instead.

WebTransactions for openUTM does not support so called "-" (minus) formats. Please use WebTransactions for OSD instead. Line-mode messages will be supported.

The limited number of processes per user in POSIX (currently 500, see POSIX information file – parameter MAXUP) also limits the number of parallel WebTransactions sessions.

To enable WebTransactions to transfer all the files of a WebTA application equally to all platforms (Pack&Go) this procedure is determined:

All text resources of the Web server are stored in EBCDIC code, because the code is default for Apache. All files are recognized as text resources whose name contains one of the following strings:

"/msg/", "/html/", "/javascript/", "/style/", ".htaccess", ".htm", ".wmt", ".clt", ".fld", ".wtc", ".txt", ".js", ".css", ".service" or whose filename is exactly "upicfile" or "localapps".

Use hostnames as they are generated in BCAM.

If cluster is used in BS2000 the file upicfile within the base directory must have the same content as upicfile on the BS2000 user-id assigned to Apache.

The BS2000 tool IFG2FLD is contained in SINLIB.WEBTRANS-OSD.075 and can be started from this library.

All files and subfolders created while the installation of WebTransactions are stored in /opt/WebTrans/7.5/apache/htdocs. The web server gets access to this directory with an alias called "webtav75" stored in webta.conf.

3.4.1 General notes

Demos:

The demos supplied with the product can be started with the link [http://<server>\[:server-port\]/webtav75/startDemos_e.htm](http://<server>[:server-port]/webtav75/startDemos_e.htm)

WebLab/external HTML editors:

If you want to use an external HTML editor, please make sure that the editor is compatible with the templates of WebTransactions. In general, when working with external HTML editors you must not use nested wt-tags.

Web browsers:

In order to use Mozilla Firefox as browser for sessions started by WebLab, enter the application name "firefox" in the WebLab menu

Options/Preferences/Programs.

Using Mozilla Firefox the maximum length for a valid URL may be exceeded. To avoid this, create base directories with shortest path names as possible.

Java:

If an output is sent to java.lang.System.out and the trace of WebTransactions is switched on, this output will be sent to stderr instead of stdout. If following error occurs during initialization of the Java Virtual Machine "Error occurred during initialization of VM. Signal chaining not allowed for VM interrupt signal, try -XX:+UseAltSigs.", before the first java call (x=new WT_JAVA.....).the option '-XX:+UseAltSigs' must be set.

It must be set either new for example with "WT_SYSTEM.JAVA_OPTIONS=new Array ('-XX:+UseAltSigs');", or existing options must be extended.

Accuracy of calculation:

The accuracy of calculation is limited. Positive numbers lie between 5.397605346934018e-79 and 7.237005577332245e+75.

In BS2000 under Posix NaN returns the biggest permissible number. The class attribute Not a Number (NaN) therefore cannot be used as usual.

Arithmetic with infinity / -infinity is not fully supported.

Infinity is identified with the largest presentable number and assigned to the result if overflows occur. For example, 1/0 or 7.237005577332245e+75*2 will return the correct value of infinity. But infinity-infinity returns 0 and infinity/2 returns a finite value.

3.5 Discontinued functions (and those to be discontinued)

The following functions are no longer supported as of this version:

The integration of applications with business objects is no longer supported. The class templates are cancelled. Same functionality can be achieved with the functions `taggedOutput()` and `taggedInput()`.

3.6 Incompatibilities

- Apart from the following restrictions, WebTransactions for openUTM (BS2000) V7.5B is fully compatible with WebTransactions for openUTM (BS2000) V7.1:
- *B The method `toString()` was changed incompatibly and may lead to different results now. The recreation of identical contents by means of `eval()` was limited by the previous method.

3.7 Restrictions

3.8 Procedure in the event of errors

If an error occurs, the following error documents are needed for diagnostics:

- *B - Test case scenario (A detailed description of the error condition, indicating whether and how the error can be reproduced)
- *B - Templates and field files
- *B - Holder-Trace (activated e.g. via WebLab)
- UPIC trace
- *B - Files in the folder `diagnosis` in WebTransactions installation folder, if they exist.
- *B - System dumps / cores (if available)
- *B - System traces (if available)
- Wtgate traces (if available)

Internet:

<https://serviceportal.ts.fujitsu.com/esm/its.do>

(German and English)

4 Hardware requirements

- *B WebTransactions for openUTM (BS2000) V7.5B runs on all business servers supported by OSD/BC as of V9.0, resp. OSD/XC as of V9.0

5 Firmware levels

6 Patents and OpenSource use

WebTransactions

Protected by U.S. patent 6,725,254,
German patent DE 198 14 859

OpenSource module libc

License:
GNU Lesser General Public License (LGPL)
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OpenSource module Zip/UnZip

License:
<http://www.info-zip.org>

OpenSource module Expat (XML Parser)

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