

Setting Application Parameters in ABAP Web Dynpro



Applies to:

NetWeaver 7.02. For more information, visit the [Web Dynpro ABAP homepage](#).

Summary

This document discusses ABAP Web Dynpro Application Parameters – what they are, how they can be set, and which ones to pay attention to in NW 7.02. In particular, we look at how global application parameters can be adjusted to improve the look and feel of all your ABAP Web Dynpro applications.

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Created on: 28 August 2011

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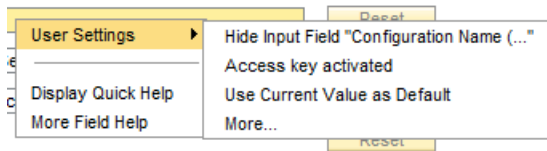
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Introduction

Application Parameters can be used to control a number of different options when an ABAP Web Dynpro Application runs. A simple example is WDDISABLEUSERPERSONALIZATION: this determines whether or not a user may personalize a Web Dynpro Application, for example by hiding unwanted fields.



This document is only concerned with Application Parameters that are predefined by SAP (they can also be specific to a particular application).

These predefined Application Parameters have existed since the earliest days of ABAP WD, but have grown in number in subsequent enhancement packs - this document is written with reference to NW7.02. The document should be read together with the SAP Help on this topic:

http://help.sap.com/saphelp_nw70ehp2/helpdata/en/73/142b2a79fb4884a4b4e87fa88f4115/content.htm

How Application Parameters Are Determined

The same Application Parameters can be set in numerous places. The actual value used each time an application runs, is determined in a hierarchy.

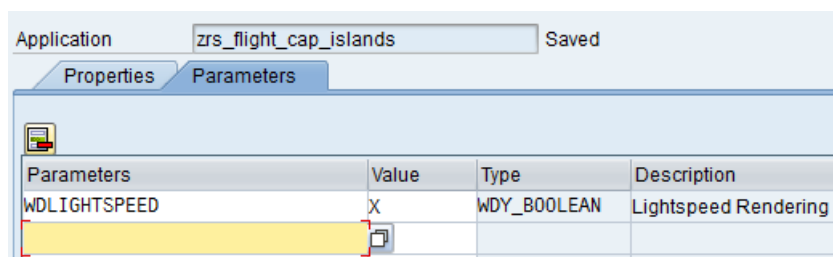
Global Settings

Global Settings provide the parameter values that will be used, if nothing else is specified at a lower level. SAP supply a set of default values, but these may be changed - this is discussed in much more detail below.

Note that Global Settings are **client dependent** and are **not transported**. That's to say they can be different in each client and system. For example you may want to allow user personalization in Dev and QA, but not in Production. It may be the case that you would need to open your production system for configuration to make the settings there.

In the Application

As the name suggests, Application Parameters can be set in the definition of a Web Dynpro Application:



The search help shows all the available options. It makes sense to set a parameter here if:

- A different option is required to what has been set globally. Remember global settings may differ across the landscape, so it may be a difference from the Production settings, but not from the Dev settings, or vice-versa.
- Less likely, but possible: there's an expectation that a global setting may be changed in the future, but it's important for the application to retain the specified value.

The point is that the application does not need to specify values for every parameter, just for those where it should differ from the global settings.

Note that it's entirely possible to define **multiple applications for the same component**, each having different parameter settings. For example a 'user' application may not allow personalization, whilst an 'administrator' version of the same app could allow it.

In an Application Configuration

Settings made in the Application can in turn be over-ridden by those made in an Application Configuration.

Application Configuration ZRS_FLIGHT_CAP_ISLANDS_C1

test Application Configuration

Save Check New Window Display Test

Attributes Structure **Application Parameters**

Application Parameters

Activate Accessibility Mode:	<input type="checkbox"/>
Allow Multiple Actions per Round Trip:	<input type="checkbox"/>
Default Values for Input Fields:	ON <input type="button" value="copy"/>
Configuration Name:	<input type="text"/>
Delta Rendering:	<input type="text"/> <input type="button" value="copy"/>
Do Not Allow Personalization by the User:	<input type="checkbox"/>
Application starts with a loading animation:	0 <input type="button" value="copy"/>
Permit eCatt Rendering:	<input type="checkbox"/>

The default values shown on this tab are determined by the settings further up the hierarchy. This offers a further way to create different variations of the same underlying component.

User Settings

A small number of parameters may be set for **all applications** for an individual user - for example WDACCESSIBILITY, which causes additional data to be sent in the HTML output, for use by a screen reader for example. These can be set in SU01 - more information is available in SAP Help:

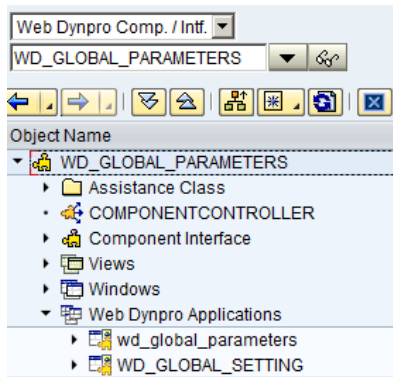
http://help.sap.com/saphelp_nw70ehp2/helpdata/en/19/e64941bfb4de2be10000000a1550b0/content.htm

As a URL Parameter

The final, most specific way to set a parameter is as a URL parameter in the current call. Note that not all Application Parameters have an equivalent URL parameter. This technique could be useful for testing or problem solving, as it means that parameters may be changed without altering the underlying development objects.

Maintaining Global Settings

Global Settings are themselves maintained using a web dynpro application. In NW 7.02 the application has been much improved. The component is **WD_GLOBAL_PARAMETERS**, the application is either the same, or **WD_GLOBAL_SETTING**:



Note that in earlier enhancement packs, the component was called **WD_GLOBAL_SETTING**, so this application name has presumably been retained for compatibility reasons.

Note also that you may need to activate this application in transaction SICF to be able to use it.

The app looks like this:

Cross-Application Settings for Web Dynpro ABAP

SAP System ID: UK0 Client ID: 001

Save Change Cancel Update Values Display Default Values Display Change Information Display URL Parameter

* Parameters	Value
Activate Accessibility Mode (WDACCESSIBILITY):	<input type="checkbox"/>
Allow Multiple Actions per Round Trip (WDALLOWMULTIPLEAC...):	<input checked="" type="checkbox"/>
Default Values for Input Fields (WDALLOWVALUESUGGEST):	<input type="text" value="Value Suggest is Activated"/>
Configuration Name (WDCONFIGURATIONID):	<input type="text"/>
Delta Rendering (WDELTA_RENDERING):	<input type="text" value="Default Setting"/>
Application starts with a loading animation (WDDISPLAYLOADI...):	<input type="text" value="Automatic: Animation Displayed. Start with 2"/>
Permit eCatt Rendering (WDENABLEXBCMLCLIENT):	<input type="checkbox"/>
Control Help Center Display (WDHELPCENTERDISPLAY):	<input type="text" value="Default Setting"/>
Extended Help Off by Default (Exception per Field) (WDHIDEMO...):	<input type="checkbox"/>
Lightspeed Rendering (WDLIGHTSPEED):	<input checked="" type="checkbox"/>
Save Application (WDPROTECTEDAPPLICATION):	<input type="checkbox"/>
Runtime Repository as Shared Object (WDSHAREDREPOSITOR...):	<input type="checkbox"/>
Scroll Behavior of Tables (WDTABLENAVIGATION):	<input type="text" value="Default"/>

Adjustments

* Parameters	Value
Do Not Allow Personalization by the User (WDDISABLEUSERPE...):	<input type="checkbox"/>

(there are further parameters below Adjustments)

The option buttons on the right-hand side can be switched on and off to allow you to see:

- The SAP default values for each option (very helpful if changes have been made)
- When each setting was changed, if at all.
- The equivalent URL parameter if one is available

Changed parameters are marked with a star and may be reset to the default value:

* Extended Help Off by Default (Exception per Field) (WDHIDEMORE...

Reset

Note that in some cases the default value is described as '**Default Setting**'. This may mean that the default depends on the client. For example for 'Control Help Centre Display', the Help Centre is normally displayed in a new popup, but in Netweaver Business Client it's displayed as a side panel.

Remember: as discussed earlier, the settings are made individually for each System and Client – they are not transported. Any differences from the SAP defaults are stored in table WDY_SETTINGS.

Individual Global Parameters

Having looked at the wider concept of Application Parameters, we will now consider some of the parameters in more detail. Remember the SAP Help referenced earlier has descriptions of each parameter.

Parameters that changed in NW7.02, compared with NW7.01:

WDELTA_RENDERING

Old default: OFF New default: ON

This means that when a screen is to change, only views where changes have occurred are redrawn, not the entire view assembly. This should improve performance and result in a smoother feel for the user.

This has an implication for developers: for best performance encapsulate areas of separate functionality in separate views. For example if building a tabstrip, the contents of each tab should be encapsulated in its own view. This principle is enforced by using Floorplan Manager anyway. Similarly it may be advantageous to encapsulate tables or other complex UI elements in their own view.

WDUSEANIMATION

Old default: OFF New default: ON

Effects are shown when windows are opened or closed. This should enhance the user experience, but the option is available to switch them off, for example if system performance issues were encountered.

New Parameters that are ON by default in NW7.02:

WDALLOWMULTIPLEACTIONS

This is a technical change to the phase model which is described here:

http://help.sap.com/saphelp_nwpi711/helpdata/en/49/b8c706c7c26d7ce10000000a421937/content.htm

The change may be switched off if it was found to cause a problem for Web Dynpros developed in an earlier Netweaver release. If that happened, then switching off at application level would be a more appropriate response than changing the global setting.

WDALLOWVALUESUGGEST

Suggested Values are a major usability improvement in NW7.02:

http://help.sap.com/saphelp_nw70ehp2/helpdata/en/8c/20efbd1b0a463ba5914356f01de03f/content.htm

Airline:

Flight Number:

Customer Number:

AA American Airlines

AB Air Berlin

★ AC Air Canada

AF Air France

AZ Alitalia

They must be switched on individually by the developer for the required fields – setting this flag does not make them appear on its own. Note that:

- They don't work if accessibility mode is switched on (but this should be set for individual users, not globally).
- They generate more data traffic than not having them. If performance issues were encountered, this parameter could be used to switch them off either globally or at application level.

New Design Parameters in NW 7.02

WDUIGUIDELINE

Default: UI Guidelines 1.1 (GL11)

This parameter refers to SAP's internal UI Guidelines. Prior to NW 7.02 one set of guidelines were being used (GL 1.1) to determine the look and feel of applications, but subsequently these have been revised and replaced by GL 2.0. As described in SAP Help, under GL2.0 a number of UI changes are made, especially around Tables and Toolbars. A couple of the most visible differences are highlighted below.

UI Options

Create Display | Search: More Options ▾

Display Flight

	Airline	Flight Number	Date	Airfare	Airline Currency	Plane Type	Max. capacity econ.	Occupied econ.
<input type="checkbox"/>	AC	0820	20.12.2002	1,222.00	CAD	A330-300	320	12
<input type="checkbox"/>	AF	0820	23.12.2002	2,222.00	EUR	A330-300	320	2
<input type="checkbox"/>	LH	0400	28.02.1995	899.00	DEM	A319	350	3
<input type="checkbox"/>	LH	0454	17.11.1995	1,499.00	DEM	A319	350	2
<input type="checkbox"/>	LH	0455	06.06.1995	1,090.00	USD	A319	220	1

Flight

Airline:

Flight Number:

Date:

Airfare:

Airline Currency:

Plane Type:

Figure 1: with GL11 (default)

UI Options

Create Display Search: More Options ▾

Graduated Fill

Display Flight

Airline	Flight Number	Date	Airfare	Airline Currency	Plane Type	Max. capacity econ.	Occupied econ.
AC	0820	20.12.2002	1,222.00	CAD	A330-300	320	12
AF	0820			EUR	A330-300	320	2
LH	0400			DEM	A319	350	3
LH	0454	17.11.1995	1,499.00	DEM	A319	350	2
LH	0455	06.06.1995	1,090.00	USD	A319	220	1

Flight

Airline:

Flight Number:

Date:

Airfare:

Airline Currency:

Plane Type:

Figure 2: with GL20

By default GL1.1 is selected – this means that UI changes are not imposed on customers when they switch to NW 7.02 from a lower release. However clearly SAP believes that GL2.0 gives a better user experience. Two possible scenarios for this setting are:

- The customer is now on NW 7.02, and has not made extensive productive use of ABAP web dynpro applications up to now.
 - In this case it's difficult to see a reason not to switch GL20 on, to take advantage of the UI improvements as web dynpro starts to be utilized.
- The customer had already been making productive use of ABAP web dynpros in an earlier Netweaver version, and has now switched to NW7.02.
 - In this case there is a business decision required to weigh up any potential difficulties (such as additional support calls) associated with a UI change, against the potential benefits from the improved design.

The parameter can also be set at application level, however remember that it may be confusing for a user if the web dynpro apps they use do not all look consistent and behave the same way.

WDSTYLE_TOOLBARDESIGN

Default: Highlighted Toolbar design

Using this parameter, the new Toolbar design may be switched on without applying all the other changes associated with GL20.

If GL20 is set then this parameter has no effect. However to create a Toolbar with the old design just make it design 'emphasized'.

UI Options

Create Display Search: More Options ▾

Emphasized Toolbar Design

Display Flight

Airline	Flight Number	Date	Airfare	Airline Currency	Plane Type	Max. capacity econ.	Occupied econ.
AC	0820	20.12.2002	1,222.00	CAD	A330-300	320	12

WDSTYLE_LABELALIGNMENT

Default: Labels left-aligned

This is one of the most significant changes in GL2.0 – SAP have concluded that input forms are generally better off having labels right-aligned. One reason for this is that some labels can be much longer than others, which with left-alignment can leave the shorter labels a long way from their related fields:

Flight

Airline: AC

Flight Number: 0820

Date: 20.12.2002

Airfare: 1,222.00

Sometimes fields have long labels: CAD

Plane Type: A330-300

Right-alignment resolves this issue, although now the Section Header is now further away from the form fields:

Flight

Airline: AC

Flight Number: 0820

Date: 20.12.2002

Airfare: 1,222.00

Sometimes fields have long labels: CAD

Plane Type: A330-300

Note that an existing Web Dynpro designed with left-aligned labels, may look worse if labels are switched to be right-aligned. It depends on the individual view and how it was defined.

Perhaps for that reason, labels will remain left-aligned, even if GL20 is selected. To make labels right-aligned then this parameter must also be set, either globally or at application level.

As well as align left and right options, the 'USEGL' option will determine the alignment based on the UI Guidelines parameter (left aligned for GL11, right aligned for GL20). This may be very helpful if GL20 is only being used on specific applications rather than globally.

Other Parameters of Interest

WDDISABLEUSERPERSONALIZATION

As discussed earlier, this can be used to switch off user personalization options. This is sometimes preferred when organizations are concerned that allowing users to hide fields or set default values will lead to a greater support overhead. However that concern must be weighed against the potential productivity improvements for users who are able to use the features successfully.

This setting in particular may need to differ across the system landscape. Whilst there may be a case for setting the parameter in a Production or Training system, the default value feature in particular can be extremely useful in a Testing or Development environment.

WDPROTECTEDAPPLICATION

This is described in more detail in SAP Help. There may be a case for setting this parameter for individual applications where 'security is critical' - perhaps when dealing with credit card details for example?

Conclusion

The vast majority of Application Parameters can be left with their default settings at a global level.

The key parameters that require a policy decision are:

WDDISABLEUSERPERSONALIZATION

WDUIGUIDELINE

WDSTYLE_LABELALIGNMENT

Related Content

[SAP Help on Application Parameters in NW 7.02](#)

[The author's earlier blog on ABAP Web Dynpro](#)

For more information, visit the [Web Dynpro ABAP homepage](#)

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