

# IBM DB2 for LUW Parameter Check Tool - An Automated Check of IBM DB2 for LUW Parameters in SAP System Landscapers



## Applies to:

The Parameter Check Tool is part of the DBACOCKPIT and available since SAP Basis 7.00 EHP2 SP6.

For more information, visit the [Landscape Design and Architecture homepage](#).

## Summary

SAP products have been released for several versions of the IBM DB2 for Linux, UNIX, and Windows database (in the following, IBM DB2 for Linux, UNIX, and Windows is referred to as DB2 for LUW or DB2). For each of these DB2 versions, SAP makes special recommendations for the database manager and the database parameterization as well as for the DB2 registry variables.

To automatically check the existing parameterization of a DB2 for LUW database against the SAP recommendations, you can use the new, very easy-to-use parameter check tool.

In this paper, the basic and enhanced functionality as well as the user interface of the parameter check tool are described. This paper describes the following in detail:

- The download mechanism of SAP Notes, which is the background process for providing the current parameter rules
- The many rule-based and built-in checks
- The differing behaviour of the parameter check tool on the SAP GUI-based user interface and on the Web browser-based user interface

After reading this paper, you will know about the detailed parameter checks and how to use the parameter check tool. You will also be able to interpret the tool behaviour and its output in different situations.

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## Author Bio



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## Introduction

### Short Description

You use the new parameter check tool to easily check the existing parameterization of a DB2 for LUW database against the SAP recommendations. It automatically downloads the SAP parameter recommendations and checks the existing DB2 database manager configuration, the database configuration, the DB2 registry variables, and the buffer pool settings against these recommendations. The tool reports deviations from the SAP standard recommendations. You can correct these deviations either automatically by changing the respective parameters or by declaring them as intended.

Before the parameter check tool was introduced, you had to manually check the parameterization of the DB2 database against the SAP recommendations, that is, each parameter in turn. With the parameter check tool, this whole process is performed automatically within seconds. You can use the parameter check tool also for systems using the database partitioning feature (DPF). Since these systems often have more than 20 partitions, checking each partition of DPF systems manually was very time-consuming in the past.

### Background – Motivation – Purpose

Before the introduction of the parameter check tool, there was no way to interactively automatically check the configuration of the database against the current recommendations. You had to determine the configuration manually to find out if a problem had been caused by a configuration mismatch.

The SAP EarlyWatch Service provided some database parameter checks in the past, but these checks are based on parameter rules that are stored in an SAP internal EarlyWatch framework that is not connected to the SAP Notes that contain the parameter recommendations.

If an SAP parameter recommendation was changed, these changes had to be maintained twice, that is, in the respective SAP Note and in the EarlyWatch Service. As changes in the EarlyWatch Service are not provided immediately, but via Support Packages, there were delays until the modified checks reached the customer system. Until the time when the recommendations in the SAP Note and the checks that are performed during SAP EarlyWatch Service sessions are equivalent, you might receive EarlyWatch Alerts although you have correctly implemented the current SAP recommendations.

Solving these issues was the major motivation for creating the parameter check tool. There is one SAP Note per DB2 release and these SAP parameter notes serve as a master location for the parameter rule information. The parameter check tool simply downloads the appropriate SAP parameter note that contains the rules from SAP Service Marketplace.

The SAP parameter notes can be updated easily and quickly, and as customer systems that are using the parameter check tool download the updated parameter rules immediately, these systems are always checked against up-to-date rules.

The parameter check tool provides a new checking mechanism that ensures that the checks are always executed based on up-to-date rules. In addition to the interactive checks that you can perform, support engineers can find out more easily if parameter mismatches are the reason for a reported problem.

## SAP Parameter Notes - Master Note

The parameter check tool supports several DB2 versions. For each version, separate standard parameter recommendations have been published in SAP Notes. The table below provides a list of the supported database versions together with the respective SAP Note number for the standard parameter settings:

<i>DB2 Version</i>	<i>SAP Note Number</i>
<b>DB2 9.1</b>	899322
<b>DB2 9.5</b>	1086130
<b>DB2 9.7</b>	1329179

### Master Note 1334923:

The master note 1334923 contains the information shown in the above table.

The parameter check tool first downloads the master note 1334923. Then it determines the version of the database to be checked. By parsing the master note, the tool determines the number of the SAP parameter note that contains the rules for the specific database release.

The master note also contains a list of registry variables. This list is independent of the database version (superset of all DB2 versions). It is a list of registry variables that you are allowed to set in SAP systems.

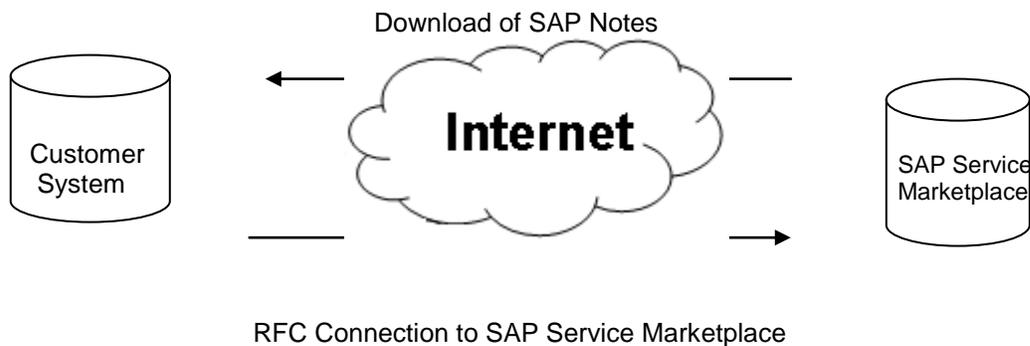
For more information, see *Built-In Checks [page 14]*

## Technical Prerequisites

### Downloading SAP Notes Using Transaction SNOTE

To download SAP Notes from SAP Service Marketplace, the parameter check tool uses an RFC connection.

Transaction SNOTE, which is available in every SAP system, provides a tool that directly connects to SAP Service Marketplace and downloads SAP Notes to a cache in your SAP system. The purpose of the SNOTE transaction is to download and automatically implement ABAP code corrections for SAP business applications that are included in SAP Notes.



This download mechanism is also used by the parameter check tool. It downloads the DB2 standard parameter notes for the specific release and stores the note text in the cache of the system. After the download from SAP Service Marketplace, the SAP Note is read from the cache and parsed for parameter rules.

To be able to download SAP Notes from SAP Service Marketplace, you have to configure an RFC connection to SAP Service Marketplace in your SAP system using transaction SM59 as described in SAP Note 797001.

### Checking the Connection to SAP Service Marketplace

After you have configured the RFC destination to SAP Service Marketplace, you can test the connection by choosing the following menu paths (in SM59):

- *Utilities* → *Test* → *Connection Test*
- *Utilities* → *Test* → *Authorization Test*

If both tests do not return any errors, you have configured the connection correctly for the parameter check tool.

## Tool Functionality

### Calling the Parameter Check Tool in the DBA Cockpit

To call the parameter check tool, call transaction DBACOCKPIT and select a DB2 for LUW system from the system landscape toolbar. In the navigation frame, choose *Configuration* → *Parameter Check*. The parameter check tool starts automatically for the selected system.

The following is an example of the SAP GUI-based user interface:

The screenshot shows the SAP GUI interface for the 'SDB: Configuration - Display Parameter Check' tool. The interface is divided into three main sections:

- Navigation Frame (1):** Located on the left, it shows a tree view of system configuration options. The 'Parameter Check' option is highlighted.
- Action Area (2):** The main central area displaying the results of the parameter check. It includes a table of deviations found for system SDB.
- Framework Message Window (3):** Located at the bottom, it displays a list of system messages related to the parameter check process.

The table in the action area shows the following data:

Parameter Type	Parameter	Member	Recommended Value	Parameter Value	Deferred Value
DB	APPLHEAPSZ	0	=AUTOMATIC	10000	10000
DB	DATABASE_MEMORY	0	=AUTOMATIC	237760	238832
REG	DB2_RR_TO_RS	0	NOT [O]	ON [O]	
REG	DB2BIDI	0	NOT SET	ON	
REG	DB2NOTIFYVERBOSE	0	NOT [O]	YES [O]	
REG	DB2_DUMP_SECTION_ENV	0	NOT SET	on	

The framework message window at the bottom shows the following messages:

- SDB Database connection SDB\_ADM established successfully
- SDB Reading SAP Note 0001334923 from buffer successfully completed
- SDB Downloading SAP Note with parameter rules for 09.05.0002 ...
- SDB Determined SAP Note number with parameter rules for 09.05.0002 is 1086130
- SDB Reading SAP Note 1086130 from buffer successfully completed

The SAP GUI-based user interface consists of a navigation frame (1) on the left, the action area (2), and the framework message window (3).

You can also run the parameter check tool using the Web browser-based user interface (Web Dynpro). The following is an example of the Web browser-based user interface:

The screenshot shows the SAP DBA Cockpit Web Dynpro interface. The left navigation pane (1) contains various system management options. The top message window (3) displays system status and messages. The main content area (2) shows the 'Parameter Check' results for system 'pcibm23', listing parameters, their recommended values, current values, and deferred values.

Parameter Type	Parameter	Member	Recommended Value	Parameter Value	Deferred Value
DBM	INSTANCE_MEMORY	0	>=125000	660338	100000
DBM	MON_HEAP_SZ	0	=AUTOMATIC	100	127
DB	AVG_APPLS	0	=AUTOMATIC	10	10
DB	CATALOGCACHE_SZ	0	>=2560	2500	2500
DB	DATABASE_MEMORY	0	=AUTOMATIC	237536	238832
DB	DBHEAP	0	=AUTOMATIC	50000	50000
DB	UTIL_HEAP_SZ	0	>=50000	49900	49900
REG	DB2BIDI	0	NOT SET	ON	
REG	DB2NOTIFYVERBOSE	0	NOT [0]	YES [0]	
REG	DB2_DUMP_SECTION_ENV	0	NOT SET	on	
REG	DB2_RR_TO_RS	0	NOT [0]	ON [0]	

The Web browser-based user interface consists of the detail navigation frame (1) on the left, the content area (2), and the framework message window (3) on the top. In the Web browser-based user interface, the framework message window is collapsed by default. When a new message is generated, it is automatically expanded.

### Basic Functionality of the Parameter Check Tool

The parameter check tool offers the following basic functionality:

- Downloading the appropriate SAP Note depending on the DB2 for LUW version of the SAP system that is to be checked
- Parsing SAP parameter notes to obtain the parameter rules
- Filtering parameter rules to apply system attributes (BW, OS, STMM, ...)
- Determining current parameter values and checking the rules against them
- Displaying the deviations on the user interface (UI)

Note: The parameter check tool automatically detects DPF systems, that is, DB2 databases with more than one database partition. For those systems, the database configuration parameters and registry variables are automatically checked on all database partitions.

## User Interface and Enhanced Functionality

### Displaying Parameter Deviations

Parameters that deviate from the SAP recommendations are displayed on the *Deviations Found* tab page (1) in the action area of the screen *Configuration – Display Parameter Check*.

The screenshot shows the SAP Configuration - Display Parameter Check interface. The 'Deviations Found (14)' tab is selected and circled in red. The table below lists parameters with their recommended, current, and deferred values. The first row, AGENT\_STACK\_SZ, is highlighted in yellow.

Parameter Type	Parameter	Member	Recommended Value	Parameter Value	Deferred Value
DBM	AGENT_STACK_SZ	0	>=1024	1024	1000
DBM	FENCED_POOL	0	>=10	12	9
DBM	INSTANCE_MEMORY	0	>=125000	660338	100000
DBM	MON_HEAP_SZ	0	=AUTOMATIC	100	127
DB	APPLHEAPSZ	0	=AUTOMATIC	10000	10000
DB	AVG_APPLS	0	=AUTOMATIC	10	10
DB	CATALOGCACHE_SZ	0	>=2560	2500	2500
DB	DATABASE_MEMORY	0	=AUTOMATIC	237536	238832
DB	DBHEAP	0	=AUTOMATIC	50000	50000
DB	UTIL_HEAP_SZ	0	>=50000	49900	49900
REG	DB2BIDI	0	NOT SET	ON	
REG	DB2NOTIFYVERBOSE	0	NOT [O]	YES [O]	
REG	DB2_DUMP_SECTION_ENV	0	NOT SET	on	
REG	DB2_RR_TO_RS	0	NOT [O]	ON [O]	

Note: Only parameters that violate the rules are listed on the *Deviations Found* tab page. If a parameter is not listed, it matches the specific rule. The parameter value and the deferred value are checked against the recommendation. If a parameter value does not match the rule, it is displayed in the list on the *Deviations Found* tab page.

Example: See parameter `AGENT_STACK_SIZE` in the figure above: even though the parameter value matches the rule, the parameter is listed on the *Deviations Found* tab page because the deferred value violates the rule.

## Declaring Deviations “as Intended”

If a parameter value in the SAP recommendations (that is, in the SAP parameter notes) is not valid for a specific customer situation, you can declare the parameter deviation as *intended*. In this way, you can avoid the specific invalid deviation being displayed every time the parameter check runs.

If you declare a deviation as *intended*, this means that you explicitly intend this, that you are fully aware that this is a non-standard setting, and that you know the meaning of this non-standard setting. In certain special support cases, SAP even recommends that you set parameters to non-standard values.

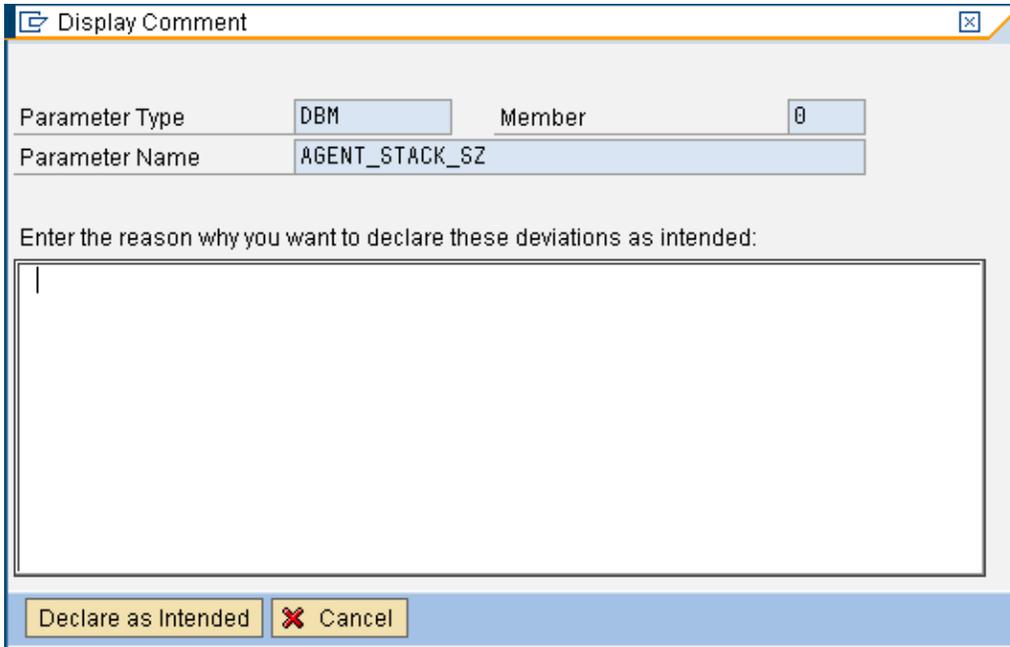
To declare a deviation as intended, select the corresponding row in the table on the *Deviations Found* tab page and choose *Declare as Intended* (2).

The screenshot displays the SAP SDB Configuration - Display Parameter Check tool. The main window shows a table of parameters with columns: Parameter Type, Parameter, Member, Recommended Value, Parameter Value, and Deferred Value. The first row is highlighted in yellow. A red circle highlights the 'Declare as Intended' button in the table's header row.

Parameter Type	Parameter	Member	Recommended Value	Parameter Value	Deferred Value
DBM	AGENT_STACK_SZ	0	>=1024	1024	1000
DBM	FENCED_POOL	0	>=10	12	9
DBM	INSTANCE_MEMORY	0	>=125000	660338	100000
DBM	MON_HEAP_SZ	0	=AUTOMATIC	100	127
DB	APPLHEAPSZ	0	=AUTOMATIC	10000	10000
DB	AVG_APPLS	0	=AUTOMATIC	10	10
DB	CATALOGCACHE_SZ	0	>=2560	2500	2500
DB	DATABASE_MEMORY	0	=AUTOMATIC	237536	238832
DB	DBHEAP	0	=AUTOMATIC	50000	50000
DB	UTIL_HEAP_SZ	0	>=50000	49900	49900
REG	DB2BIDI	0	NOT SET	ON	
REG	DB2NOTIFYVERBOSE	0	NOT [O]	YES [O]	
REG	DB2_DUMP_SECTION_ENV	0	NOT SET	on	
REG	DB2_RR_TO_RS	0	NOT [O]	ON [O]	

The status bar at the bottom shows: SDB Last download date for SAP Note 1086130 was 20091103, which was at least one day ago. Downloading SAP Note again. SDB Download from SAP Note 1086130 to buffer successfully completed.

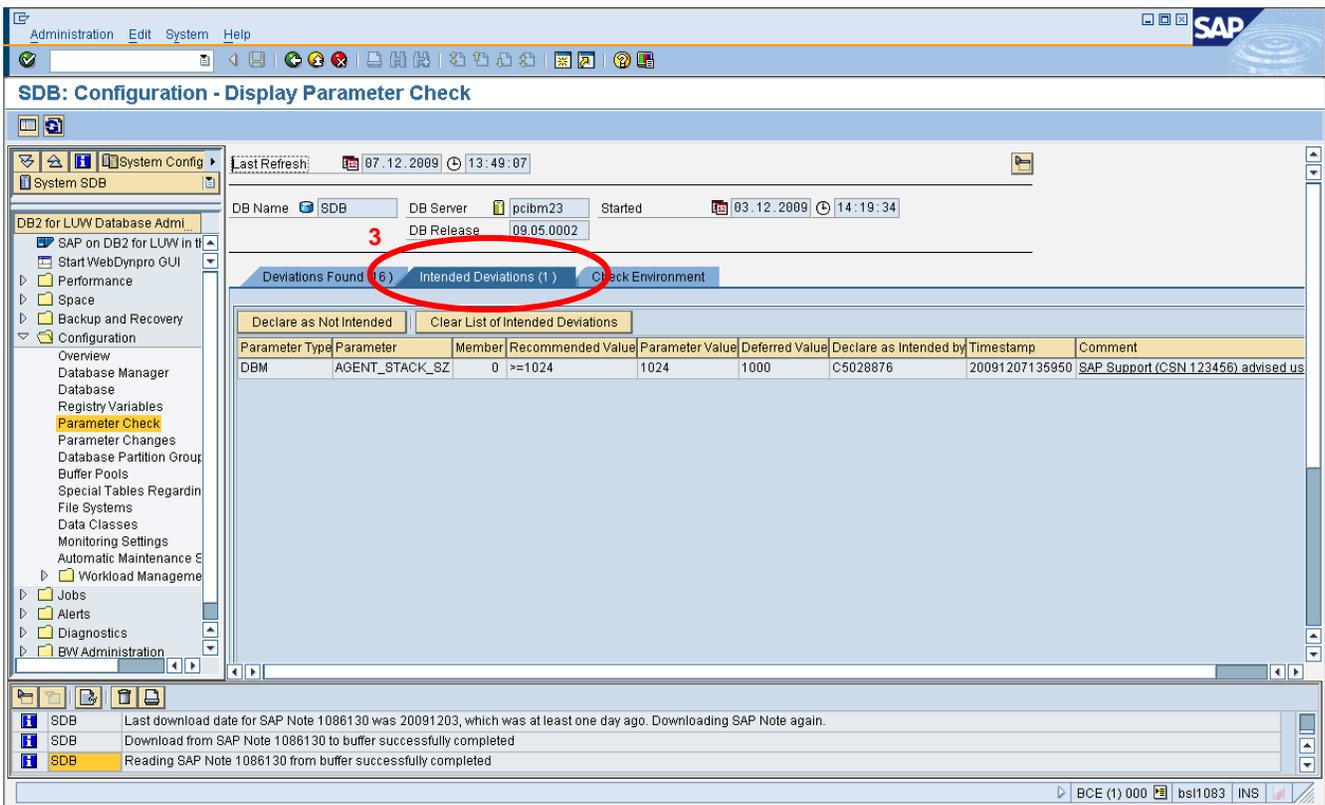
The *Display Comment* dialog box appears. Enter the reason for the parameter deviation and confirm by choosing the *Declare as Intended* pushbutton.



The corresponding parameter deviation is removed from the *Deviations Found* tab page and now appears on the *Intended Deviations* tab page.

Note: When declaring a deviation as intended, the following information regarding this action is additionally stored (see also the following figure (3)):

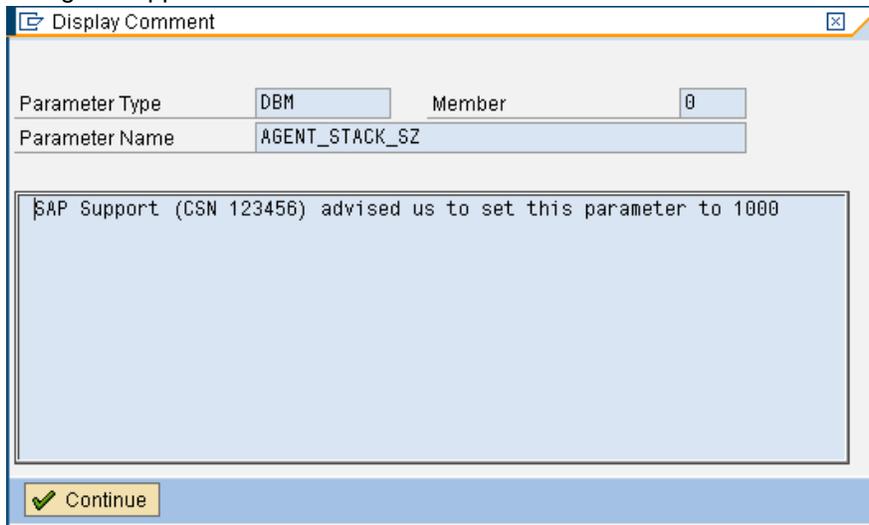
- i. User name of the SAP user who declared this parameter as intended
- ii. Timestamp of the “Declare as Intended” operation
- iii. Comment entered by the user in the *Display Comment* dialog box



On the *Intended Deviations* tab page, you can select single parameters and move them back to the *Deviations Found* tab page by using the *Declare as Not Intended* pushbutton.

To move back all intended deviations to the *Deviations Found* tab page, you can clear the complete *Intended Deviations* tab page by selecting *Clear List of Intended Deviations*.

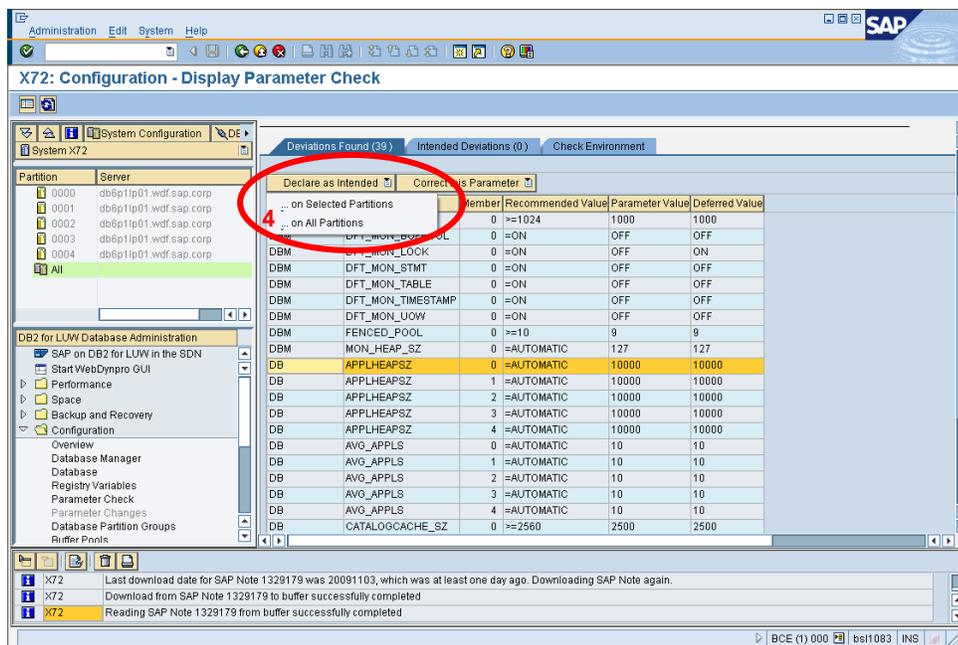
In the *Comment* column on the *Intended Deviations* tab page, the text is not completely displayed. To see the specified comment in full length, double-click on an entry in the *Comment* column. The *Display Comment* dialog box appears.



Note: If you move parameters between the *Deviations Found* and *Intended Deviations* tab page, the list of intended parameters is stored persistently in the monitored system in the table `PARAM_CHECK` in the `SAPTOOLS` schema.

### Declare Deviations “as Intended” in DPF Systems

As DB2 for LUW databases can have multiple partitions, the deviations of database (DB) configuration parameters and registry variables can occur on several partitions. To handle this appropriately on the user interface, different controls have been introduced for DPF systems. After selecting a parameter for *Declare as Intended*, you can choose whether you want to declare the deviation as intended on the selected partition only or on all partitions (4).



## Correcting Deviations

To correct deviations that are listed on the *Deviations Found* tab page, choose the *Correct this Parameter* pushbutton (5). In DPF systems, you have to choose between the correction options *On Selected Partition* and *On All Partitions*.

Parameter Type	Parameter	Member	Recommended Value	Parameter Value	Deferred Value
DBM	INSTANCE_MEMORY	0	>=125000	660338	100000
DBM	MON_HEAP_SZ	0	=AUTOMATIC	100	127
DB	AVG_APPLS	0	=AUTOMATIC	10	10
DB	CATALOGCACHE_SZ	0	>=2560	2500	2500
DB	DATABASE_MEMORY	0	=AUTOMATIC	237536	238832
DB	DBHEAP	0	=AUTOMATIC	50000	50000
DB	UTIL_HEAP_SZ	0	>=50000	49900	49900
REG	DB2BIDI	0	NOT SET	ON	
REG	DB2NOTIFYVERBOSE	0	NOT [O]	YES [O]	
REG	DB2_DUMP_SECTION_ENV	0	NOT SET	on	
REG	DB2_RR_TO_RS	0	NOT [O]	ON [O]	

If you choose the *Correct this Parameter* pushbutton, the dialog box *Change Database Configuration Parameter* appears displaying the values recommended by SAP. You can use the suggested value or enter your own. Confirm your changes by choosing *Execute*.

Parameter Name: UTIL\_HEAP\_SZ

Current Value: 50000 4KB

Deferred Value: 49900 4KB

Possible Input: 16:524288

Change Parameter Immediately Without Restart

Check Execute Cancel

The dialogs and SQL commands that are generated to change the parameters are identical to those used in the parameter maintenance in the DBA Cockpit. The parameter changes are tracked in the DBA Cockpit and you can later analyze these changes in the *Parameter Changes* section of the DBA Cockpit.

## Details

### Description of the Checks

The performed checks can be divided into two classes:

- a. Rule-based checks, which means that the rules are determined by parsing SAP parameter notes. This applies for the following:
  - i. Database Manager parameters
  - ii. Database parameters (separately on all partitions)
  - iii. Registry variables (some of these checks are rule-based)
- b. Built-in checks, which means that the checking mechanism is hardcoded inside the tool. This applies for the following:
  - i. Registry variables (another part of these checks are built-in)
  - ii. Buffer pools

### Rule-Based Checks

For rule-based checks, the rules are independent from the tool coding and located outside in the SAP parameter notes.

The following is an example of rule definitions in SAP Notes:

```
> SELF_TUNING_MEM      = OFF          [STMM=NO]
> DATABASE_MEMORY     = COMPUTED    [STMM=NO]
> DB_MEM_THRESH       = 10          [CUST]
> LOCKLIST             >= 10000     [BIT=32];[STMM=NO];[BI=NO]
> LOCKLIST             >= 20000     [BIT=64];[STMM=NO];[BI=NO]
> MAXLOCKS            = 90          [STMM=NO];[CUST]
> PCKCACHESZ          >= 5120      [STMM=NO]
```

For each supported DB2 version (9.1, 9.5, 9.7), there is a separate SAP parameter note containing the SAP recommendations for DB2 for LUW parameter settings.

The rule parsing is based on the following guidelines:

- Lines with a parameter rule start with >.
- Other lines are comment text.
- Lines marked with [CUST] are not checked. These settings strongly depend on customer scenarios for which it does not make sense to provide a check.
- Lines marked with [DEPR] are not checked. These are deprecated parameters in the specific DB2 version.
- The parameter check tool determines the current system attributes for the monitored system and compares them with the definitions in braces.
- The actual rule finally specifies if a parameter should be higher or equal, less or equal, or equal to the given value.

Attention:

The attribute STMM is not a system-wide attribute as it is controlled by the partition (member) specific database parameter `SELF_TUNING_MEM`. Therefore, the attribute STMM may be *YES* on partition 0 and *NO* on other partitions in a DPF system.

## Built-In Checks

The parameter check tool also contains a number of built-in checks:

Check 1 (refers to DB2 registry variables):

The DB2 registry knows aggregates that include a collection of registry variables for a specific use case. One of these aggregates has been designed for the SAP use case. It is called DB2\_WORKLOAD, and the appropriate value is *SAP*.

This built-in check refers to variables below the DB2\_WORKLOAD aggregate. If one of the registry variables that belong to the DB2\_WORKLOAD aggregate is set explicitly, the variable is flagged as *overwritten*. The variables that are flagged as *overwritten* are marked with [o] in the db2set output.

It does not matter if the value that was set explicitly is identical or different to the setting that is active via DB2\_WORKLOAD.

This built-in check reports all registry variables that are flagged as *overwritten* ([o]).

Check 2 (refers to DB2 registry variables):

As a general rule, no additional registry variables have to be set in an SAP DB2 environment. However, there are a number of uncritical registry variables that may be set in specific customer situations. A superset of those variables that are valid for all DB2 for LUW releases has been defined and stored in a “positive list” of “allowed registry variables”. You can find this list in the master note 1334923.

This built-in check reports all registry variables that are set in addition to those that are requested by the standard parameter note of the respective release and that are not included in the generic positive list.

Check 3 (refers to buffer pool settings):

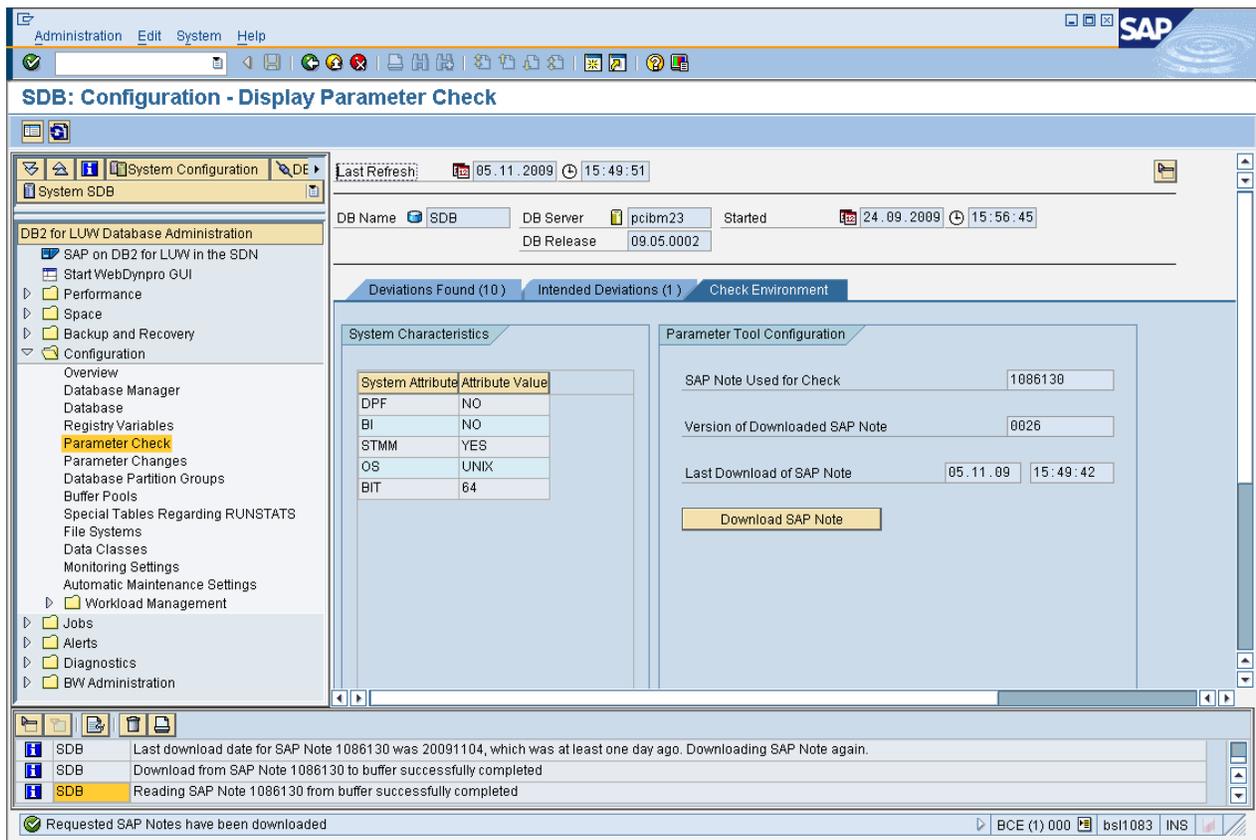
This check only applies to members with the STMM attribute set to *YES* (DB configuration parameter `SELF_TUNING_MEM=ON`).

This built-in check reports all buffer pools that have been set to a fixed size for members where STMM is enabled.

To fulfil the requirements of this built-in check for members that have *STMM* enabled, you should set the size of all buffer pools on these members to *Automatic*.

## Check Environment

Beside the *Deviations Found* and *Intended Deviations* tab page, there is also the *Check Environment* tab page in the action area of the screen *Configuration – Display Parameter Check*:



## System Characteristics

The system environment table shows the specific system attributes and attribute values referring to the monitored system:

Attribute	Description
DPF	<ul style="list-style-type: none"> <li>NO in case of a single-partition system</li> <li>YES in case of more than one partition</li> </ul>
BI	States whether or not the system has BW content imported
STMM	This attribute has three possible values: <ul style="list-style-type: none"> <li>NO if for all partitions STMM is not enabled</li> <li>YES if for all partitions STMM is enabled</li> <li>MIXED if for some partitions STMM is enabled and for some not</li> </ul>
OS	Possible values are UNIX or WINDOWS
BIT	Possible values are 32 or 64

## Version + Timestamp

In the *Parameter Tool Configuration* area, you can see the SAP Note number (depending on the IBM DB2 for LUW release of the monitored database) that has been downloaded and used for the parameter check, including the version of the note. In this way, you can verify whether or not the used version of the SAP parameter note is up-to-date.

In addition, you can see the timestamp of the last download. If the parameter check tool is called several times a day, the download takes place only once. The tool automatically checks the last download date, and only downloads the note again if the last download date was at least one day ago,. Otherwise, it takes the note from the last download (that is, from the cache).

## Manual Download

If you want to force a new download on the same day even if you already have downloaded the note once, you can use the *Download SAP Note* pushbutton. The download takes place immediately and the cache is overwritten with the most current note. You use this function if the note was updated by SAP (increased version number) and one download has already been made that day.

## Special Considerations

### Reading Required SAP Notes from Cache

Providing SAP Notes for the parameter check tool consists of the following two steps:

- Downloading the SAP Note from SAP Service Marketplace to the cache in the SAP system where you run the DBA Cockpit including the parameter check tool
- Reading the SAP Note from the cache and delivering the note text to the parameter check tool for parsing

If the latest SAP Note download (see the *Check Environment* tab page) has been made on the current day, step *a* is skipped and only step *b* is executed.

If step *a* fails because the connection to SAP Service Marketplace is temporarily not available, you receive the message that the parameter check tool was unable to download the SAP Note and that it is trying to read the last note version from the cache.

If step *b* fails (either with or without step *a*), you receive the message that the parameter check tool was unable to read the SAP Note and cannot proceed.

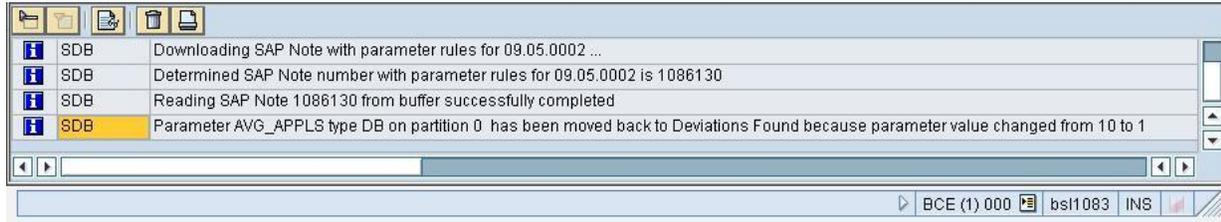
### Moving Back Intended Deviations to Deviations Found

During a parameter check, it can happen that a deviation that you had formerly declared as intended is no longer valid. You move deviations that were declared as intended back to the *Deviations Found* tab page in the following situations:

- The current parameter value in the monitored system has changed from the value at the moment when the deviation was declared as intended.
- The current deferred parameter value in the monitored system has changed from the value at the moment when the deviation was declared as intended.
- The SAP recommendation has changed regarding the threshold value, that is, SAP has changed the check from value  $\geq 10000$  to value  $\geq 20000$  since the parameter was declared as intended.
- The SAP recommendation has changed regarding the check type, that is, SAP has changed the check from value  $\geq 10000$  to value  $\leq 20000$  since the parameter was declared as intended.
- The IBM DB2 for LUW version or the Fix Pack have changed since the parameter was declared as intended.

If a deviation is declared as intended, the information about its value, deferred value, check type, check value, and database version is stored in a database table of the monitored system.

If one of these values changes at a later run of the parameter check, deviations that had formerly been declared as intended are moved back to the *Deviations Found* tab page and an explanatory message is displayed in the message window, as shown in the figure below.



### Context-Sensitive User Interface Controls

As certain actions are not available or not reasonable for all parameter types, the pushbuttons *Declare as Intended*, *Correct This Parameter* and *Declare as not Intended* are enabled or disabled depending on the selected parameter.

Examples:

- The *Correct this Parameter* function does not work for registry variables because DB2 does not offer any SQL interfaces to change registry variables.
- It is not reasonable to correct a deviation of a DBM parameter in a DPF system on *all partitions* as the database manager only exists once.
- The way pushbuttons are enabled or disabled differs on the SAP GUI-based user interface and on the Web browser-based user interface. For more information, see *Differences between the SAP GUI-Based and Web Browser-Based User Interface* [page 17].

### Differences between the SAP GUI-Based and Web Browser-Based User Interface

The parameter check tool works on the SAP GUI-based user interface as well as on the Web browser-based user interface (Web Dynpro).

These two front-end technologies provide different frameworks and user interface controls. Therefore, there are slight differences in the behaviour of these user interfaces:

- On a SAP GUI-based user interface, it is not possible to enable or disable the *Correct this Parameter* pushbutton depending on the selected row in the table of the *Deviations Found* tab page.  
This means that when you select a row for which a correction is not supported and you choose the *Correct this Parameter* pushbutton, a message is displayed explaining that the correction of this type of parameter is not supported.
- On a Web browser-based user interface, the *Correct this Parameter* pushbutton is enabled or disabled depending on the row you selected.
- In DPF systems, the pushbuttons *Declare as Intended* and *Correct this Parameter* have been replaced by menu buttons containing two menu entries, that is, *on selected partition* and *on all partitions*. The enabling or disabling of the respective menu entries works on the SAP GUI-based user interface as well as on the Web browser-based user interface.

## **Related Content**

For more information, visit the [Landscape Design and Architecture homepage](#).

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