



ANNEX: DETAIL OF MONITORS SAP PLUGIN

SAP data to monitor	-m	Type data	Interval	Firing alert
Maximum allowable quantity of memory	101	generic_data	300	-
Average response time SAPGUI	102	generic_data	300	1000
Logged users in the system	103	generic_data	300	10
IDOC Wrongs from yesterday	104	generic_proc	43200	50
IDOC Corrects from yesterday	105	generic_data	43200	-
Oracle: Tablespace, List of all, more % used (inc.autoextend)	106	generic_data_string	300	-
Oracle: Tablespace. Amount of them exceeding the 95 % used (inc.autoextend)	107	generic_data	300	4
Oracle: Tablespace. Amount of them exceeding the 99 % used (inc.autoextend)	127	generic_data	300	2
Dumps from yesterday until today(texts and amount) (inc.autoextend)	108	generic_data_string	43200	
Dumps from yesterday until today	109	generic_data	43200	10
Dumps from x hours ago until now (texts and amount) Mandatory parameter to add: -pa1 num_hours_before. Maximum 23 hours in the same day	148	generic_data_string	60 * hours	
Dumps from x hours ago until now. Mandatory parameter to add: -pa1 num_hours_before. Maximum 23 hours in the same day	149	generic_data	60* hours	10
Entries blocking system (table list and Lock mode (share/exclusive)	110	generic_data_string	300	-
Entries blocking system (amount)	111	generic_data	300	3
Job canceled since yesterday (list)	112	generic_data_string	43200	
Job canceled since yesterday (amount)	113	generic_data	43200	5
Job canceled from x hours ago until now. (list) Mandatory parameter to add: -pa1 num_hours_before. Maximum 23 hours in the same day	142	generic_data_string	60* hours	
Job canceled from x hours ago until now. (amount) Mandatory parameter to add: -pa1 num_hours_before. Maximum 23 hours in the same day	143	generic_data	60* hours	5
WP DIA wrong in the system	114	generic_data	300	1
WP DIA waiting (waiting/ available) in the instance	202	generic_data	300	Less than 1
WP BTC failing in the instance	115	generic_data	300	1
WP BTC waiting (waiting/available)in the instance	203	generic_data	300	Less than 1
WP UPD Failing in the instance	116	generic_data	300	1
WP UPD waiting (waiting/available)in the instance	204	generic_data	300	Less than 1



WP UP2 Failing in the instance	117	generic_data	300	1
WP SPO Failing in the instance	118	generic_data	300	1
WP ENQ Failing in the instance	119	generic_data	300	1
System SAP information	120	generic_data_string	43200	-
Batch input wrong since yesterday	121	generic_data	43200	1
MS SQL Server: Trans. Log current size	130	generic_data	300	Cust
MS SQL Server: Trans. Log free size available	131	generic_data	300	Cust
MS SQL Server: Trans. Log free rate available	132	generic_data	300	96
WP without active reset	150	generic_data	300	1
WP standing in the system	151	generic_data	300	1
System SAP up. Value 0 = SAP up Value 1 = SAP down	160	generic_data	300	1
System SAP up: connection error text SAPGUI	161	generic_data_string	300	-
RZ20 CCMS: Read average 15 minutes of Performance monitors CCMS Indicate parameter –pa1 with the TID separate by * (get the TID using the transaction SE37 function module SALR_MTE_GET_TID_BY_NAME and indicating the text obtained the button Properties of the RZ20) Optional: indicate parameter –pa2 with the value of the MTMCNAME, replacing spaces (if they have it) by character # Ex: -pa2 Transactional#RFC#and#Queued#RFC	180	generic_data	300	-
RZ20 CCMS: Read last value of the Monitor Performance CCMS numeric type Indicate parameter –pa1 with the TID separate by * (get the TID using the transaction SE37 function module SALR_MTE_GET_TID_BY_NAME NAME and indicating the text obtained the button Proprieties de la RZ20) Optional: indicate parameter –pa2 with the value of the MTMCNAME, replacing spaces (if they have it) by character # Ex: -pa2 Transactional#RFC#and#Queued#RFC	186	generic_data	300	-
RZ20 CCMS: Read last value of Monitor Performance CCMS numeric type Indicate parameter –pa1 with the name of Set Monitor separate by*, and with parameter –pa2 with branch MTE end and above, separate by * Get clicking in Properties in final branch. In the –pa2, use the character _ instead of space -m 187: returns the average of the past 15 minutes	187 Y	generic_data	300	-



<p>-m 179. returns the last value Ex: -m 187 -pa1 SAP_CCMS_Monitor_Templates*Entire_System* -pa2 Dialog*FrontEndNetTime</p> <p>Optional: indicate parameter -pa3 with the value of MTMCNAME, replacing spaces (if they have it) by character # Ex: -pa3 Transactional#RFC#and#Queued#RFC</p>	179			
<p>RZ20 CCMS: Read last value of Monitor CCMS type LOG (text string) Indicate the father + son of monitor (R3Syslog y BasisSystem) , separate by the character * , add like parameter -pa2 to a monitor -m 188 of Pandora SAP Plugin Ex: -m 188 -pa1 SAP_CCMS_Monitor_Templates*Entire_System* -pa2 R3Syslog*BasisSystem It will indicate the value of system log (equivalent to the transaction SM21)</p> <p>Optional: indicate parameter -pa3 with the value of MTMCNAME, replacing spaces (if they have it) by character # Ex: -pa3 Transactional#RFC#and#Queued#RFC</p>	188	generic_data_string	300	-
<p>RZ20 CCMS: Read last value of Monitor Performance CCMS type LOG (text string) indicate parameter -pa1 with TID separate by * (get the TID using the transaction SE37 function module SALR_MTE_GET_TID_BY_NAME and indicating the text obtained in the button Proprieties of the RZ20) Ex: -m 189 -pa1 010*0000001036*101*0000000018*0000000006* It will indicate the value of system log (equivalent to the transaction SM21)</p> <p>Optional: indicate parameter -pa2 with value MTMCNAME, replacing spaces (if they have it) by character # Ex: -pa2 Transactional#RFC#and#Queued#RFC</p>	189	generic_data_string	300	-
<p>Returns the number of entries in the queues qRFC de OUTPUT. Equivalent to the information of the transaction SMQ1 Optional: indicate parameter -pa1 NAME_QUEUE_qRFC</p>	190	generic_data	300	-



Suitable for alerts collapses/ delays in sending messages systems SAP XI/PI, BW, CRM , APO				
Returns the number of entries in the queues qRFC of INPUT. Equivalent to the information of the transaction SMQ2 Optional: indicate parameter -pa1 NAME_QUEUE_qRFC	191	generic_data	300	-
Suitable for alerts collapses/ delays in sending messages systems SAP XI/PI, BW, CRM , APO				
Returns wrong entries number 's (SYSFAIL) delivery attempt tRFC. . Equivalent to the information of the transaction SM58 Optional: indicate parameter -pa1 NUM_OF_DAYS_SENIORITY_MESSAGES (if not indicate, it means unfiltered seniority, selecting all)	192	generic_data	300	-
Suitable for alerts collapses/ delays in sending messages systems SAP XI/PI, BW, CRM , APO				
Returns wrong entries number 's (SYSFAIL) of the queue qRFC OUTPUT Equivalent to the information of the transaction SMQ1	195	generic_data	300	-
Suitable for alerts collapses/ delays in sending messages systems SAP XI/PI, BW, CRM , APO				
Returns wrong entries number 's (SYSFAIL) of the queue qRFC de ENTRADA Equivalent to the information of the transaction SMQ2	196	generic_data	300	-
Suitable for alerts collapses/ delays in sending messages systems SAP XI/PI, BW, CRM , APO				
Returns the number of MINUTES that the OLDEST message takes in the queue without being processing qRFC of OUTPUT. Equivalent to the information of the transaction SMQ1 Optional: indicate parameter -pa1 NAME_QUEUE_qRFC	197	generic_data	300	-
Suitable for alerts collapses/ delays in sending messages systems SAP XI/PI, BW, CRM , APO				
Returns the number of MINUTES that the OLDEST message takes in the queue without being processing qRFC of INPUT. Equivalent to the information of the transaction SMQ2 Optional: indicate parameter -pa1 NAME_QUEUE_qRFC	198	generic_data	300	-
Suitable for alerts collapses/ delays in sending messages systems SAP XI/PI, BW, CRM , APO				
Dialog ResponseTime	180 -pa1 010*00	generic_data	300	-



	00001 380*10 0*0000 00007 9*0000 00002 2*			
Dialog FrontendResponseTime	180 -pa1 010*00 00001 425*10 0*0000 00008 0*0000 00002 3*	generic_data	300	-
Dialog QueueTime	180 -pa1 010*00 00001 381*10 0*0000 00008 1*0000 00002 4*	generic_data	300	-
Dialog Load+GenTime	180 -pa1 010*00 00001 407*10 0*0000 00008 2*0000 00002	generic_data	300	-



	5*			
Dialog DBRequestTime	180 -pa1 010*00 00001 409*10 0*0000 00008 3*0000 00002 6*	generic_data	300	-

Remarks:

Monitor 108: Dumps: texts, of yesterday

The result is a line of text with the following format: <text dump> = <number of times that has happened in the last day> ;

Example:

MESSAGE_TYPE_X=3 ; LOAD_PROGRAM_NOT_FOUND=1 ;

Monitor 110: Lock inputs

The result is a line of text with the following format: <lock table> = < Lock mode (share/exclusive) E or X> ;

Example:

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root@ges-pandoradb:/var/www/sap# php SAP_plugin_monitor.php -t 192.168.77.14 -o gestds1db -i DS1 -c 100 -s 00 -m 110 -u pandora -p pandora
E070=E ; TRDIR=X ; SETHEADER=S ; SETHEADER=E ; SETHEADER=E ; CSKS=E ; CSKS=E ; TRDIR=X ; CSKS=E ; CSKS=E ; CSKS=E ; CSKS=E ;
TRDIR=X ; TRDIR=X ; CSKS=E ; CSKS=E ; STXH=E ; RSTABLE=E ; RSTABLE=E ; RSTABLE=E ; root@ges-pandoradb:/var/www/sap#
```



Monitoring points each system SAP Security – Checklist Standard v 20/10/09

z	-m	Data type	Interval	Firing alert	Resp.
Security Series: Retrieve parameter Profile Instance -pa1 = name parameter	1201	generic_data	43200	-	ADS
Security Series: Recover the historic of changes, amount of changes add/modify authorization profile, within X days prior to execution -pa1 =number of days seniority of the change. Ex: 1 -pa2 = authorization profile. Ex: SAP_ALL Ex: -m 1202 -pa1 1 -pa2 SAP_ALL Double action: you should prepare a alert to execute Java -m 1203, it is what it returns (using same parameters) for the audit report , fields (;):. User who made the modification , date, hour and letter of modification type. (C or M)	1202	generic_data_string	43200	-	ADS
Query to 1 Table. Returns: number of register found -pa1 = table name in UPPERCASE -pa2 = fields return, in UPPERCASE separate by * -pa3 = filter where, spaces by * and quotes ' by # . Replace < by / Replace > by \ Before each AND or OR, precede the character @ Do not put quotes, do not leave spaces in each field Indicate the name of fields in uppercase	1204	Generic_data	300		



<p>Ex: -m 1204 -pa1 USR02 -pa2 BNAME*ANAME*ERDAT -pa3 TRDAT*/*#DESET90DAYSAGO# Replacement macros allowed DESET0DAYSAGO DESET1DAYSAGO DESET2DAYSAGO DESET7DAYSAGO DESET30DAYSAGO DESET60DAYSAGO DESET90DAYSAGO DESET0HOURSAGO DESET1HOURSAGO DESET2HOURSAGO DESET3HOURSAGO DESET4HOURSAGO DESET5HOURSAGO DESET6HOURSAGO DESET10HOURSAGO DESET16HOURSAGO DESET1MINUTEAGO DESET5MINUTEAGO DESET10MINUTEAGO DESET30MINUTEAGO</p>					
<p>Query to 1 Table. Returns: string data .Fields separated by ;. Each register separate by *</p> <p>-pa1 = table name in UPPERCASE -pa3 = fields return, in UPPERCASE separate by * -pa3 = where, spaces by * Before each AND or OR, precede the character @</p> <p>Parameters to format the OUTPUT table -separow _</p>	1205	Generic_data_string	43200		



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Queries example

Jobs finished OK with a given name	-m 1205 -pa1 TBTCO -pa2 JOBNAME -pa3 JOBNAME*EQ*#ZJOB1#*@AND*STATUS*EQ*#F#
Jobs begin by the letter Z and canceled	-m 1205 -pa1 TBTCO -pa2 JOBNAME -pa3 JOBNAME*LIKE*#Z%#*@AND*STATUS*EQ*#A#
Jobs from yesterday until today, in Delay (waiting for a WP Batch)	-m 1205 -pa1 TBTCO -pa2 JOBNAME -pa3 JOBNAME*LIKE*#Z%#*@AND*SDLSTRDTD*GE*#DESET1DAYSAGO#@AND*STATUS*EQ*#S#
Jobs from yesterday until today, in Active, running more than 2 hours	-m 1205 -pa1 TBTCO -pa2 JOBNAME -pa3 JOBNAME*LIKE*#Z%#*@AND*SDLSTRDTD*GE*#DESET1DAYSAGO#@AND*STATUS*EQ*#R#*@AND*SDLSTRTTM*GT*#DESET1HOURSAGO#
Fields on Jobs SDLSTRDTD SDLSTRTTM = Date and hour of the launch schedule of Job STRDTD STRTTIME = START TIME IN ACTIVE ENDDATE ENDTIME = TIME TO END(OK OR NO)	Field STATUS A = CANCEL F = FINISHED R = ACTIVE S = RELEASED = Which has already reached its start time, but it IS waiting for a WP BATCH, thereby increasing the delay time.
Change detection opening of client	-m 1205 -pa1 T000 -pa2 MANDT*CCCORACTIV*CCNOCLIIND -pa3 MANDT*=#050#



Monitoring points each system SAP BPM – Checklist Standard v 20/10/09

SAP data to monitor	-m	Data type	Interval	Firing alert	Resp.
<p>Query to 2 Table. -pa1 = table name -pa2 = fields, separate by * -pa3 = where, with the spaces by * and the quotes ' by # . Replace < by / Replace > by \ Do not put quotes, do not leave spaces in each field Indicate the name of fields in uppercase</p> <p>Returns: number of registers found Ex: -m 1210 -pa1 USR02 -pa2 BNAME*ANAME*ERDAT -pa3 TRDAT*/*#DESET90DAYSAGO#</p> <p>Replacement macros allowed DESET0DAYSAGO DESET1DAYSAGO DESET2DAYSAGO DESET7DAYSAGO DESET30DAYSAGO DESET60DAYSAGO DESET90DAYSAGO DESET0HOURSAGO DESET1HOURSAGO DESET2HOURSAGO DESET3HOURSAGO DESET4HOURSAGO DESET5HOURSAGO DESET6HOURSAGO DESET10HOURSAGO DESET16HOURSAGO DESET1MINUTEAGO</p>	1210	Generic_data	43200		



DESET5MINUTEAGO DESET10MINUTEAGO DESET30MINUTEAGO					
Example: -m 1210 -pa1 USR21 -pa2 BNAME*PERSNUMBER -pa4 1 -pb1 ADRP -pb2 PERSNUMBER*NAME_TEXT -pb4 0					

Safety 's data to monitor	Parameter	Value min_critical , alert threshold
[SEC] Number of invalid login attempts until user	-m 1201 -pa1 login/fails_to_user_lock	Print value Report Audit, with timestamp. Not Relevant for alert
[SEC] Min. number of chars which differ between old and new password	-m 1201 -pa1 login/min_password_diff	Print value Report Audit, with timestamp.
[SEC] Min. number of digits in passwords	-m 1201 -pa1 login/min_password_digits	Print value Report Audit, with timestamp. Not Relevant for alert
[SEC] Minimum Password Length	-m 1201 -pa1 login/min_password_lng	Print value Report Audit, with timestamp. Not Relevant for alert
[SEC] Enable automatic unlock off locked user at midnight	-m 1201 -pa1 login/failed_user_auto_unlock	Print value Report Audit, with timestamp. Not Relevant for alert
[SEC] List of Words of the list of Passwords not allowed	-m 1205 -pa1 USR40 -pa2 BCODE	Print table of result Report Audit, with timestamp. .Not Relevant for alert
[SEC] List of users not login in the last 3 months (saving licenses SAP)	-m 1205 -pa1 USR02 -pa2 BNAME*TRDAT -pa3 TRDAT*/*#DESET90DAYSAGO#	Print table of result Report Audit, with timestamp. .Not Relevant for alert
[SEC] List of users who have never logged in the system (saving licenses SAP)	-m 1205 -pa1 USR02 -pa2 BNAME -pa3 TRDAT*=#00000000#	Print table of result Report Audit, with timestamp. .Not Relevant for alert
[SEC] Recover the historical changes, the list of users changes add/modify a authorization profile, within X days before the execution. -pa1 =number of days antiquity change. Ex: 1 -pa2 = authorization profile . Ex: SAP_ALL Note: for the amount, use -m 1202 -pa1 7 -pa2 SAP_ALL	-m 1203 -pa1 7 -pa2 SAP_ALL	Print table of result Report Audit, with timestamp. .Not Relevant for alert TEST OK in VMW
[SEC] List of users who has currently the profile SAP_ALL, but who are not those in a white list of users sap who allow them to have SAP_ALL	-m 1206 -pa1 SAP_ALL -pa2 desetmon1.txt	Print table of result Report Audit, with timestamp. .Not Relevant for alert



<p>You should write this users in the file called "/tmp/desetmon1.txt" (separate by) Optional: indicate with parameter -pa2.filename other users admitted</p>		
<p>[SEC] List of users who has currently the profile SAP_ALL</p>	<p>-m 1207 -pa1 SAP_ALL</p>	<p>Print table of result Report Audit, with timestamp. .Not Relevant for alert</p>

<p>Test Series: Return the value -pa1 = xxx</p>	<p>1900</p>	<p>generic_data o string</p>	<p>300</p>	<p>-</p>	<p>ADS</p>
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