



BatchMan

Manual BatchMan Job Interface

Product Info & Support

Phone: + 49 (0) 40/32 80 86 - 0
E-Mail: batchman@honico.com
Web: www.honico.com
Release: BatchMan 5.0
Date: December 2016

SAP® Certified
Powered by SAP NetWeaver®



Contents

1.	Introduction	3
2.	Job interface	3
2.1.	Setup job interface	3
2.2.	Customizing the job interface	4
2.3.	Monitoring the job interface	7
2.4.	Job interface test driver	9
2.5.	Job interface reorganization	9
3.	User jobs	10
3.1.	User jobs concept	10
3.1.1.	Interruption of job execution via authorizations	11
3.1.2.	Interruption of job execution via job interception	11
3.2.	Customizing the user job interface	13
3.3.	User jobs authorization concept	13
3.4.	Manual user job scheduling	15
3.5.	Monitoring the user job queue	16

1. Introduction

As of Release 4.1, BatchMan has a job interface that makes it possible to execute certain standard SAP jobs via the BatchMan job control. The advantage of such an approach is the possibility of the subsequent load and resource distribution for these jobs, differentiated by individual instances and operating modes.

The user jobs form one subset of the interface jobs in BatchMan®. User jobs are jobs that are defined, scheduled and started independent of BatchMan® via the standard SAP job scheduling. The objective of the user job control in BatchMan® is the global transfer and control of these jobs. This has the advantage that end users can continue to schedule and start their jobs themselves, but the administrators receive control over these jobs. All user jobs pass a user-job-specific authorization check and are then started according to the resource distribution defined in the job interface.

2. Job interface

2.1. Setup job interface

To access the setup of the job interface, choose:

BatchMan *Function tree* → *Customizing* → *Setup Programs* → *Setup Parameter*

Click on the *Job interface* tab page.

Interface and user jobs each have a scheduler belonging to BatchMan®.

If you want to use interface or user job functions, activate first the corresponding scheduler. Then you can decide whether the scheduler concerned is to run in the BatchMan master job or in the BatchMan scheduler. The difference between these two alternatives is only in the period length.

The middle section of the setup defines the various user job strategies cf. Section 3.1 User jobs concept.

The last parameter defines the retention time of interface and user jobs ended cf. Section 2.5 Reorganization of job interface.

The screenshot shows the 'BatchMan setup' window with the 'Jobinterface' tab selected. At the top, 'BatchMan Release' is set to '4.1.0'. Below this are tabs for 'Syst. status', 'General data', 'Extension data', 'Graphic settings', and 'Jobinterface'. The 'Jobinterface' tab contains the following settings:

- ☒ Activate Interface Scheduler
 - ☐ .in BatchMan-Masterjob
 - ☒ .in BatchMan-Scheduler
- ☒ activate Userjob Scheduler
 - ☐ .in BatchMan-Masterjob
 - ☒ .in BatchMan-Scheduler
- ☐ take over SAP jobs in status scheduled
- ☒ take over intercepted jobs (with a small icon)
- ☒ Automatically activate job interception on all defined client systems

At the bottom, 'Strategy for job release in the Instance' is set to '7'.

2.2. Customizing the job interface

To access the job interface Customizing, choose:

BatchMan *Function tree* → *Customizing* → *Interface customizing* → *Define Interfaces*

After you enter the **interface name**, you can select the function you want:

	Create a new interface
	Edit an existing interface
	Display an existing interface (also with the ENTER pushbutton)
	Delete an existing interface
	Call the Init mode, all fields are deleted
 List	Selection list of all existing interfaces
 List with selection	Selection list of all existing interfaces with selection by name
 Entry	Create transport for an interface
 Release	Release interface
 Lock	Block interface

Depending on the edit or display mode, not all functions are activated at the same time; pushbutton-deactivated functions are suppressed.

BM: Interface description

Interface name: TEST_INTERFACE

Description:

Send alert on: Team Alert tool

positive event

negative event

Template Instances

Job name

*EXAMPLE

EXAMPLE*

Created : MZWIERZ 19.06.2007 12:56:31

Changed : MZWIERZ 19.06.2007 13:05:41

The individual fields are illustrated using a test interface as an example. **Interface name** TEST_INTERFACE and create pushbutton. Then all other fields are ready for input.

Team and **Alert tool** define the recipients and the respective alert methods for interface jobs in the “finished” status (positive result) or the “aborted” status (negative result). If these fields are empty, no alert occurs. If these fields are maintained, the alert occurs after ending the interface job according to its ending status.

The teams are maintained via [BatchMan Function tree → Customizing → Basic customizing → Message team / Recipient definitions](#).

The documentation **BM_d_AIERTHB_YYMM** describes the Customizing of the various alert types (alert tools) using examples.

In contrast to the alert tools in BatchMan® it is currently not yet possible to send the job log of the related jobs for the alert.

The BM_USERJOBS interface defines as a special case the interface for the user jobs. This interface provides an additional option of the alert. In addition to the alert specified above, this option consists of notifying the creator of a job, after his/her job has ended, which was executed via the BatchMan® user job interface. This notification occurs as an express message via SAP Office Mail and also includes the complete job log of the job concerned in addition to the ending status. This alert method only applies to the BM_USERJOBS interface and occurs by activating the related checkbox.

☒	.Mail to originator (positive and negative)
Message is being send by SAP Office Mail	

On the bottom section of the Customizing screen, there are two tab pages: **template and instances**. Since the BM_USERJOBS interface also includes some special rules here, this section is once again described separately especially for the user jobs cf. Section 3.2 Customizing user job interface.

Template describes a one-column table, in which special templates for the job name can be entered. In the relevant interface, only jobs are processed that fit this defined job sample. Wildcard entries are permitted.

The job sample table offers the following functions:

	Insert individual line
	Insert several lines
	Delete lines marked

Instances describe a multi-column table, in which the load distribution can be defined for the individual instances.

Lines cannot be created here manually since they refer to valid instances and related operating modes.

New entries may be added via the **Read instances** menu bar option.

Under **Settings**, this menu option offers the selection option between all or only production operating modes.

The **all from remote connection** entry transfers all target systems maintained in BatchMan® into the instances table.

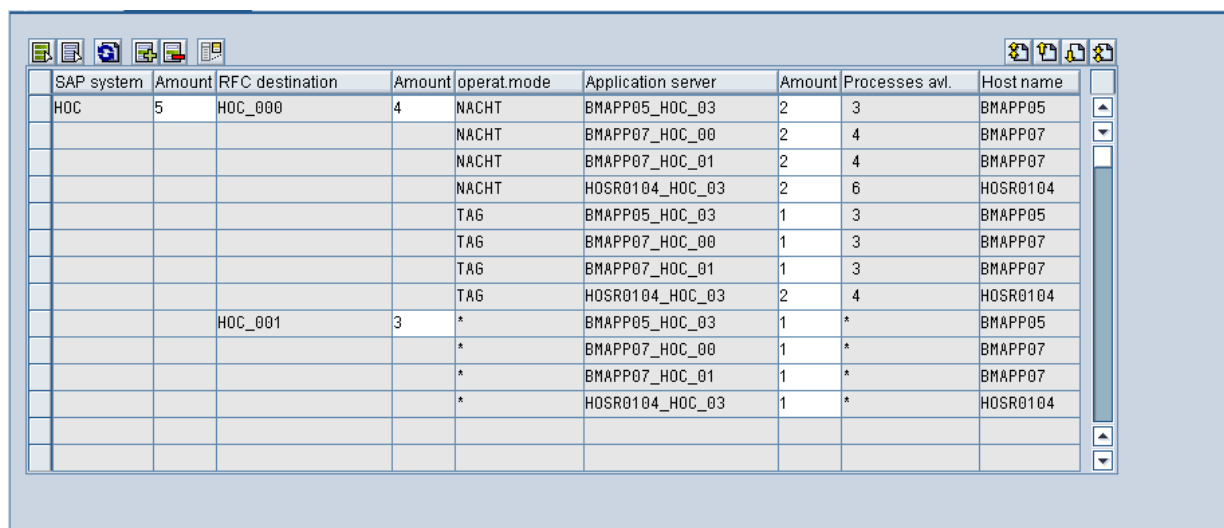
Select from remote connection enables the selection and subsequent transfer of individual target systems into the instances table.

The same is possible via the  pushbutton of the instances table.

	Select all lines
	Delete all line selections
	Update the available batch processes
	Select new target systems and insert into the table
	Delete lines selected

	Combine operating modes
---	-------------------------

The significance of the individual table columns is illustrated with this example:



SAP system	Amount	RFC destination	Amount	operat.mode	Application server	Amount	Processes avl.	Host name
HOC	5	HOC_000	4	NACHT	BMAPP05_HOC_03	2	3	BMAPP05
				NACHT	BMAPP07_HOC_00	2	4	BMAPP07
				NACHT	BMAPP07_HOC_01	2	4	BMAPP07
				NACHT	HOSR0104_HOC_03	2	6	HOSR0104
				TAG	BMAPP05_HOC_03	1	3	BMAPP05
				TAG	BMAPP07_HOC_00	1	3	BMAPP07
				TAG	BMAPP07_HOC_01	1	3	BMAPP07
				TAG	HOSR0104_HOC_03	2	4	HOSR0104
		HOC_001	3	*	BMAPP05_HOC_03	1	*	BMAPP05
				*	BMAPP07_HOC_00	1	*	BMAPP07
				*	BMAPP07_HOC_01	1	*	BMAPP07
				*	HOSR0104_HOC_03	1	*	HOSR0104

The test interface shown defines the load distribution of the interface jobs for the **SAP System** HOC. Column 2 (**Amount**) is where the definition of how many interface jobs in total may run on this SAP system at the same time, regardless of all other factors.

RFC destination described the target system and divides the SAP system for instance into the various clients. For each target system, you also have the option to define the number of interface jobs simultaneously running (line 4, **Amount**), however the restrictions from the number of jobs defined for the entire SAP system already apply here (column 2). The individual **RFC destinations** are further divided into all existing instances for this system with their possible operating modes. Operating modes, such as the number of the batch processes available are maintained via SAP transaction RZ04.

In column 7, **Amount**, you define how many of the available batch processes for each instance and operating mode you want to use for the job execution of this interface. The restrictions apply from column 4 (number of jobs for each RFC destination) and column 2 (number of jobs for each SAP system). If you do not want to carry out any differentiation by individual operating modes, you can combine the individual operating modes using the  pushbutton so that differentiation is then carried out only by instances.

Thus in the HOC_000 target system, a maximum of 4 jobs run for this test interface at the same time, in the HOC_001 target system, a maximum of 3 jobs run; but only 5 jobs at the maximum on the SAP system, thus in total on both together.

On HOC_000 in the NIGHT operating mode, a maximum of 2 jobs run at the same time for each instance, in total a maximum of 4. In the DAY operating mode, a maximum of 1 job for each instance with the exception of the HOSR0104_HOC_03 instance (2 jobs), in total again a maximum of 4.

HOC_001 runs a maximum of 3 jobs, these run in operating modes, a maximum of 1 job regardless for each instance. Thus one instance is always free.

Note that for the subsequent scheduling of jobs in the scheduler always those batch processes are taken into account that are available at that time. The number of jobs defined via the interface and that are to be released thus always defines the maximum value.

2.3. Monitoring the job interface

To access the monitoring of the job interface, choose:

BatchMan® Function tree → **Monitoring** → **Other Monitors** → **Monitoring job interface**

Using this monitoring, you can monitor all interface jobs with the exception of user jobs. User jobs have a separate monitoring cf. Section 3.5 User job monitoring.

You can access monitoring of interface jobs via a selection screen. Here you have the option of selecting jobs by certain criteria and thus displaying only the number of the jobs you want. All interface jobs with the exception of user jobs are event-controlled. You can thus select your jobs by a certain event or parameter in addition to status, creation period and job or interface name.

The job overview is displayed via an ALV list. The system displays a list of the interface jobs that met the selection restrictions selected. Interface jobs may have 6 different statuses.

released: Job is released and is waiting for the scheduler run

active: Job is started and **active**. This status remains until the scheduler detects the **finished** status. It is thus possible that, depending on the scheduler period, the state remains longer than in the standard SAP system (SM37). As soon as the job goes to the **active** status, the instance where the job is running as well as the start time are known and transferred to monitoring.

finished: The job is ended successfully

- aborted:** The job is ended with errors
in the job log, you can find one indication as to the possible error
- locked:** In monitoring, you have the option of locking jobs
Jobs in this status remain untouched in this status until they are unlocked or deleted.
- scheduled:** This status represents a special case, but may run if a job goes from the **released** status into the **active** status and the job execution is caught by concepts of the user jobs, e.g. by job interception (cf. Section 3.1.2 Interrupting job execution via job interception). The job returns to the **scheduled** status and remains in this status until the user job scheduler takes control.

For the status change to occur you have to update the job overview; you also have the option to set the automatic update at the same time.

Under the Settings → Auto-refresh menu option, you have the option to maintain the auto-refresh properties.

BM: Job overview 19.06.2007 16:15:12 AR: 15 sec.

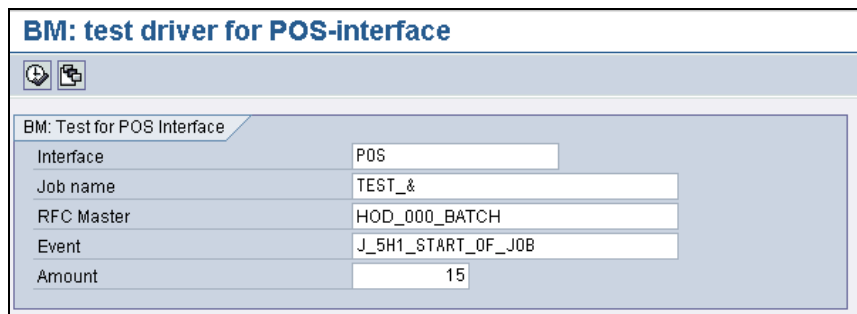
Interface	Jobname	Jobcount	Job state	Target system	Instance	Event	Event parameter	Start date	Start time
TEST_INTERFACE	EXAMPLEJOB_002	16140401	released	HOD_000		J_5H1_START_OF_JOB	EXAMPLEJOB_002161...		00:00:00
TEST_INTERFACE	EXAMPLEJOB_001	16140401	released	HOD_000		J_5H1_START_OF_JOB	EXAMPLEJOB_001161...		00:00:00
TEST_INTERFACE	EXAMPLEJOB_003	16140401	released	HOD_000		J_5H1_START_OF_JOB	EXAMPLEJOB_003161...		00:00:00
TEST_INTERFACE	EXAMPLEJOB_004	16140501	finished	HOD_000	BMD1_HOD_00	J_5H1_START_OF_JOB	EXAMPLEJOB_004161...	19.06.2007	16:14:07
TEST_INTERFACE	EXAMPLEJOB_005	16140501	finished	HOD_000	BMD1_HOD_00	J_5H1_START_OF_JOB	EXAMPLEJOB_005161...	19.06.2007	16:14:07
TEST_INTERFACE	EXAMPLEJOB_006	16140501	finished	HOD_000	BMD1_HOD_00	J_5H1_START_OF_JOB	EXAMPLEJOB_006161...	19.06.2007	16:14:07
TEST_INTERFACE	EXAMPLEJOB_007	16140501	finished	HOD_000	BMD1_HOD_00	J_5H1_START_OF_JOB	EXAMPLEJOB_007161...	19.06.2007	16:14:07
TEST_INTERFACE	EXAMPLEJOB_008	16140501	active	HOD_000	BMD1_HOD_00	J_5H1_START_OF_JOB	EXAMPLEJOB_008161...		00:00:00
TEST_INTERFACE	EXAMPLEJOB_009	16140501	active	HOD_000	BMD1_HOD_00	J_5H1_START_OF_JOB	EXAMPLEJOB_009161...		00:00:00
TEST_INTERFACE	EXAMPLEJOB_010	16140501	active	HOD_000	BMD1_HOD_00	J_5H1_START_OF_JOB	EXAMPLEJOB_010161...		00:00:00
TEST_INTERFACE	EXAMPLEJOB_011	16140501	active	HOD_000	BMD1_HOD_00	J_5H1_START_OF_JOB	EXAMPLEJOB_011161...		00:00:00
TEST_INTERFACE	EXAMPLEJOB_012	16140501	locked	HOD_000		J_5H1_START_OF_JOB	EXAMPLEJOB_012161...		00:00:00
TEST_INTERFACE	EXAMPLEJOB_013	16140501	locked	HOD_000		J_5H1_START_OF_JOB	EXAMPLEJOB_013161...		00:00:00
TEST_INTERFACE	EXAMPLEJOB_014	16140501	released	HOD_000		J_5H1_START_OF_JOB	EXAMPLEJOB_014161...		00:00:00
TEST_INTERFACE	EXAMPLEJOB_015	16140501	released	HOD_000		J_5H1_START_OF_JOB	EXAMPLEJOB_015161...		00:00:00

The job list has certain functions that may be useful for the job administration. Some functions require the jobs concerned to be previously selected.

	Update job list
	Trigger start event manually for job selected
	Lock job
	Release job
	Display job (in SM36)
	Delete job
	Display job steps
	Display spool list
	Display job log
	Change layout

2.4. Job interface test driver

BatchMan report /BTCMAN/C_PT4 is a test report for creating interface jobs.



BM: test driver for POS-interface	
Interface	POS
Job name	TEST_&
RFC Master	HOD_000_BATCH
Event	J_5H1_START_OF_JOB
Amount	15

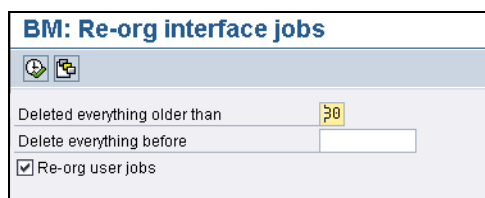
Here, interface jobs are created in the current standard SAP system and in the interface job queue of the RFC master system selected. As start criterion, the event defined is used with a sequence parameter that is generated.

You can use this report as a template for creating separate interface jobs.

2.5. Job interface reorganization

Both interface jobs and user jobs are kept in special BatchMan® tables known as job queues. For improved runtimes, a periodic reorganization of these tables is recommended. This reorganization fulfils 2 tasks. For one, it compares all jobs saved with the SAP standard job control (table TBTCO). Since all interface jobs build on standard SAP jobs, it is recommended to clean up jobs that were already removed from the standard SAP job scheduling by the reorganization. Secondly, finished jobs are deleted after a retention period that can be defined. The default value of this retention period can be defined in the job interface setup cf. Section 2.1 Setup job interface.

Due to the comparison logic against the TBTCO table, the retention period in effect may never be greater than the retention period in the standard SAP job control, however.



BM: Re-org interface jobs	
Deleted everything older than	30
Delete everything before	
☒ Re-org user jobs	

The complete reorganization is used only for BatchMan® internal tables. It is recommended to carry out the job interface reorganization after the reorganization of the standard SAP job table TBTCO (report RSBTCDEL) to have the same status for both tables.

The "User job reorg" flag determines whether or not the user job queue is also to be reorganized; it is recommended to leave this flag activated.

After the reorganization is finished, you will receive a deletion log, which lists all jobs listed.

3. User jobs

3.1. User jobs concept

User jobs are jobs from end users that are scheduled via the standard SAP job scheduling (e.g. SM36) without using BatchMan®.

In addition, BatchMan® also offers the option of manual user job scheduling Transaction /BTCMAN/C_UJ3 (cf. Section 3.4 Manual user job scheduling). Thus, there are three different user job types: **SAP job**, manually created **ABAP report** as well as **BatchMan job** (jobs upon user request).

Manually created user jobs are transferred directly into the user job queue cf. Section 3.4. Manual user job scheduling. SAP job user jobs are defined by the end user directly in the SAP system.

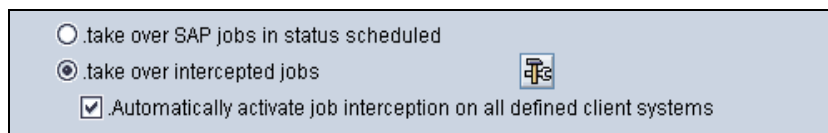
The goal of the user job control in BatchMan® is a global transfer of these end user jobs. For this, the standard job execution is interrupted. Then these jobs are collected in the so-called user job queue. As of this point in time, BatchMan® user job scheduler takes control. The user jobs caught run through a user-job-specific authorization check cf. Section 3.3 User jobs authorization concept.

If this authorization check is a success, then the user jobs are started by user job scheduler according to their start criteria within the scope of the defined interface resource distribution for the interface BM_USERJOBS.

A central part of the user job concept is interrupting the standard job execution.

The user job concept of BatchMan® provides two options for interrupting the job execution. The first option is the removal of the SAP authorization for the job release cf. Section 3.1.1 Interrupting the job execution via authorizations. The second variant is by job interception cf. Section 3.1.2 Interrupting the job execution via job interception.

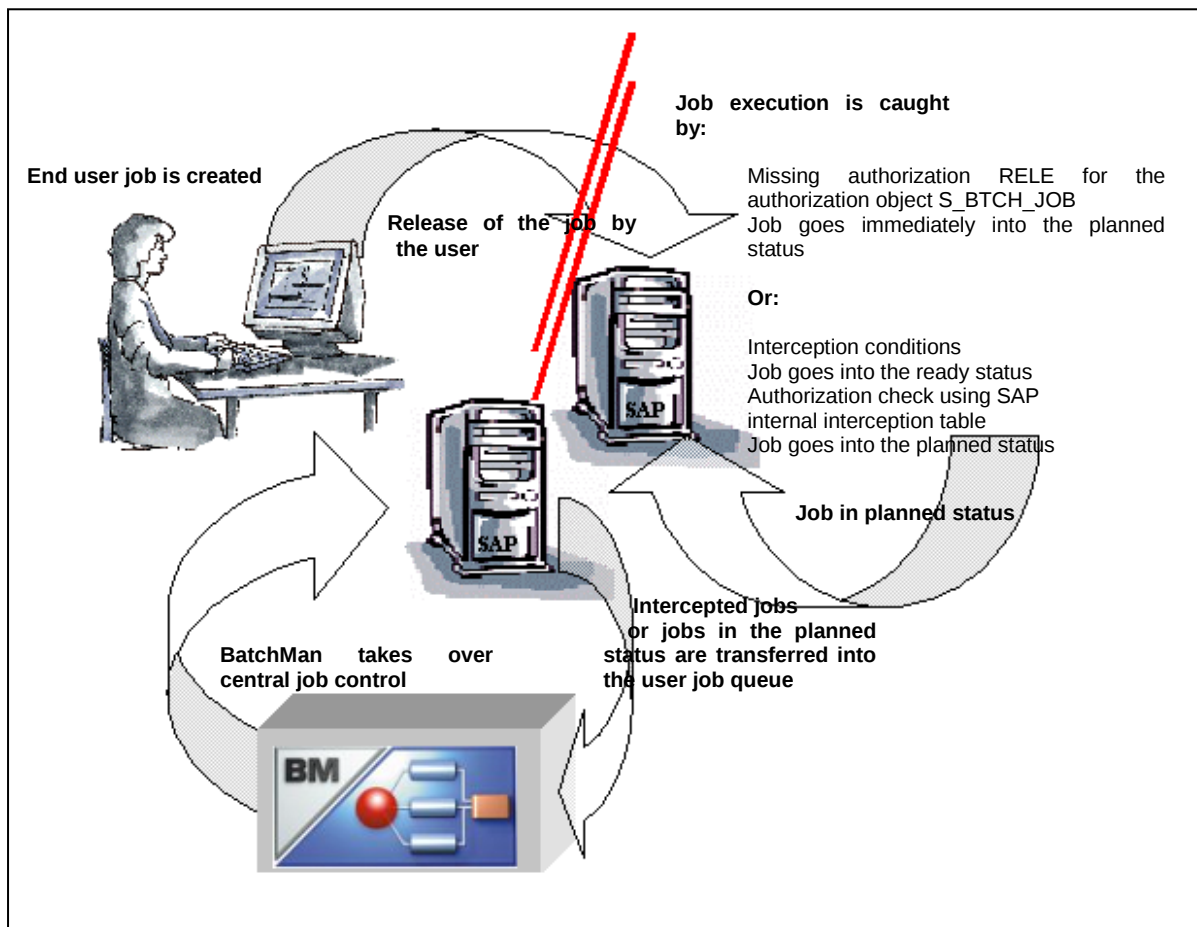
You can choose a variant by setting this in the setup (cf. Section 2.1 Setup job interface).



The screenshot shows a configuration window with a light blue background. It contains three options: a radio button for '.take over SAP jobs in status scheduled', a selected radio button for '.take over intercepted jobs' (with a small icon to its right), and a checked checkbox for '.Automatically activate job interception on all defined client systems'.

Both options reset the job to the planned status.

That means the user job scheduler collects both jobs without authorization as well as intercepted jobs with the **Transfer SAP jobs in the “planned” status** setup flag. If you only want to use the job interception, activate the **Transfer intercepted jobs** flag and jobs with missing authorization are ignored.

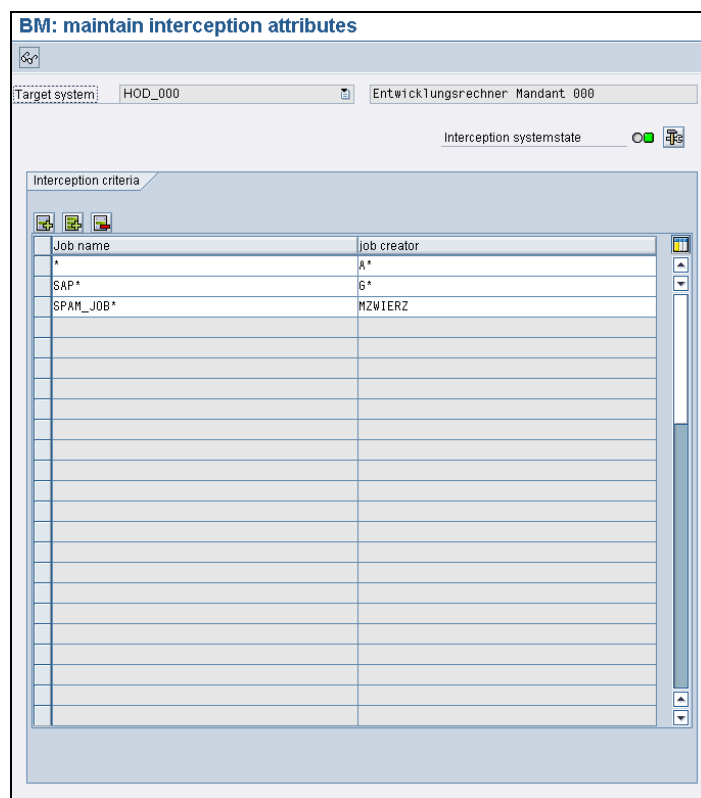


3.1.1. Interruption of job execution via authorizations

The authorization RELE of the authorization object S_BTCH_JOB enables the automatic release of jobs upon their scheduling. If end users do not have these authorizations, no more jobs are automatically released, but they go into the planned status. The removal of authorization RELE leads immediately to an interruption of the job execution. The job remains ready in the planned status for the transfer into the user job queue.

3.1.2. Interruption of job execution via job interception

Job interception is a feature of the XBP 2.0 interfaces. The main point here is SAP table TBCICPT1 in which you maintain interception properties. The following illustration shows the BatchMan® maintenance report for this table. You can access this report in the BatchMan® setup via the  pushbutton (cf. Section 2.1 Setup job interface) or alternatively via Transaction J5H1_UJ5.



The TBCICPT1 table consists of the job name and job creator columns and provides an exclusion list for the job scheduling. If the R3 scheduler detects that all start criteria are fulfilled for a job, it checks this job against the TBCICPT1 table for activated interception. If the job name and job creator fit a pattern in this table, the job is reset from the released status into the scheduled status. The job execution is interrupted.

You can activate the job interception for an SAP system using the  pushbutton (alternatively via the SAP report INITXBP2).

The LED links next to the pushbutton indicate whether or not the interception is activated for the target system concerned.

	Interception properties edit mode
	Interception properties display mode
	Copy interception properties to another target system
	Activate job interception
	Add lines
	Add several lines
	Delete line selected

Be aware that activating the interception properties is client-independent for the entire SAP system, while entries in the TBCICPT1 table are client-dependent.

You continue to have the option of (de)activating the job interception automatically by the user job scheduler for all client systems defined (cf. Section 2.2 Customizing the job interface). This setting option is in the setup cf. Section 2.1 Setup the job interface.

Be aware that the job interception belongs to the SAP standard system and thus always stops all jobs defined in the TBCICPT1 table, independent of BatchMan®. These jobs only run if the BatchMan® user job scheduler is activated. If you stop BatchMan® for a longer period of time, you should thus deactivate the job interception on your SAP system.

Furthermore, you should select the interception criteria such that neither the BM_BATCH user nor the DDIC user are impacted. The DDIC user should not be intercepted since SAP transports automatically generate jobs (RDDIMPDP) that run under this user. If these jobs are intercepted, the transports are held up until the jobs have run. BM_BATCH should not be intercepted to prevent the day-to-day business of BatchMan® from being impacted.

Thus, entries like *, B* or D* should not appear in the job creator column.

Also ensure that neither the BatchMan master job nor the BatchMan scheduler are intercepted since these contain the user job scheduler.

3.2. Customizing the user job interface

You can access the user job Customizing like customizing the job interfaces via BatchMan® Function tree → Customizing → Interface customizing → Define Interfaces

User jobs form a special case of the interface jobs under the interface name BM_USERJOBS.

You can call the user job interface via the menu bar under **BatchMan Interface**.

The setup of the resource distribution for the individual instances occurs as for the interface jobs cf. Section 2.2 Customizing the job interface.

The template tab page is not required for the user job interface and is inactive.

3.3. User jobs authorization concept

In BatchMan, user jobs run through an authorization check prior to their release; these authorizations are independent from the SAP authorizations of the respective user, which may also be required.

You can access the authorization maintenance of the user jobs via

BatchMan Function tree → Customizing → Interface customizing → Authorization maintenance user jobs

Priority	Target sys	Report-Jobname	Auth. type	Variants	User-group	Type	Adm. Vari	Authorization
1	H00_000	*	ABAP-Report	*	*	User	X	
2	H00_000	*	SAP-Job	*	*	User		
3	H00_000	*	ABAP-Report	*	S*	User		
4	H00_000	*	ABAP-Report	*	M*	User		
5	H00_000	*	SAP-Job	*	S*	User		

The authorization concept follows five simple rules:

- If no relevant authorization rules are found, the authorization object is initially set to “released”.
- Authorizations can be removed and added.
- For the **target system**, **report/job name**, **user/groups** fields as well as variants, you can make * entries. (e.g.: user: BM* would cover all users whose user name starts with the letters BM.)
- Authorizations are priority-dependent; authorizations with a higher priority overwrite authorizations with a lower priority.
- Authorizations for ABAP reports generally have a higher priority than authorizations for jobs. If an ABAP report is locked, no job is released that contains this ABAP report – even job rules with a higher priority are ignored.
- If the user does not have authorization for a certain report, then the variant maintenance for this report is generally locked, unless it is explicitly released again at a higher priority.

The **variant maintenance** authorization only refers to the branch to the variant maintenance in the report for the manual user job scheduling, Transaction J5H1_UJ3 (cf. Section 3.4 Manual user job scheduling).

Variant maintenance via the standard SAP system (e.g. SE38) is still possible with the respective SAP authorization.

Since the rules can quickly become complex, you have the option of running through individual authorization cases using the **test authorizations** button. You receive the same authorization statements, such as the subsequent authorization check in the user job scheduler.

	Create new authorization rules
	Test authorizations
	Switch to table view
	Display help
	Switch to table view
	Switch to form view
	Edit authorizations
	Display print list
	Delete authorizations
	Increase priority of the authorization rule

	Decrease priority of the authorization rule
	Switch to form view
	Display mode
	Edit mode

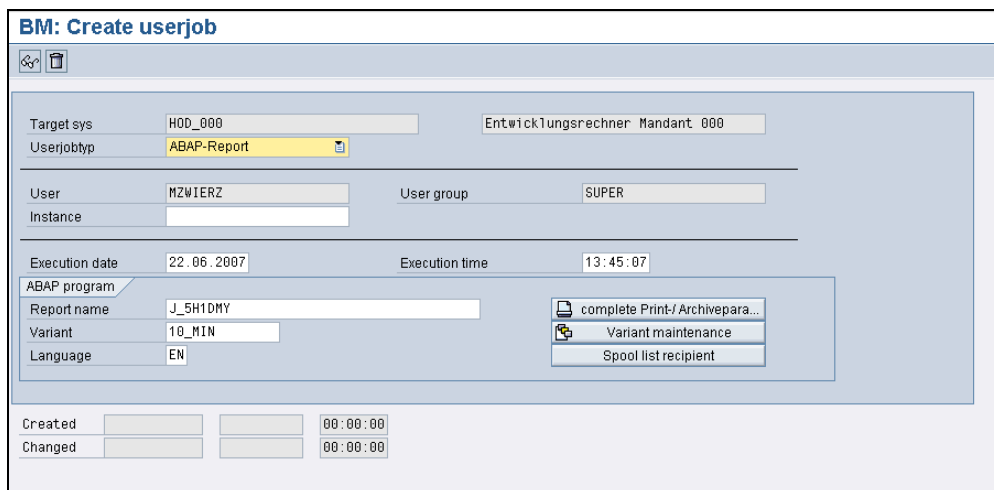
Depending on the edit or display mode and on the form view or table view, not all functions are activated at the same time; pushbutton-deactivated functions are suppressed.

If a user job violates the authorization rules it remains in the **no authority** status, or it cannot be scheduled during the manual user job scheduling. If, in monitoring, you later find jobs in this status, you have the option to change the relevant authorization rules accordingly or manually release the job or delete it if you do not want to allow this job.

For the authorization maintenance of the user jobs, you require the J5H_USRJOB_A authorization for the J_5H authorization object.

3.4. Manual user job scheduling

The report for the manual user job scheduling is included in the BatchMan® client transport, i.e. you can execute it also on all BatchMan® client systems in addition to the master system. You can access the user job scheduling via Transaction J5H1_UJ3 and alternatively also via monitoring cf. Section 3.5 Monitoring the user job queue.



For the manual user job scheduling, there are two types of user jobs: ABAP report and BatchMan job. ABAP report user jobs contain exactly one ABAP report as a step. Like for the standard job scheduling, it is possible to choose the printing/archiving parameters, the variants and the spool list recipients. The variant maintenance requires the respective user job authorization cf. Section 3.3 User jobs authorization concept.

BatchMan job user jobs are BatchMan jobs that users are allowed to request. The BatchMan job then runs as a user job, but only its step list is executed here. Other attributes defined in BatchMan, such as the start criteria; alerts, recovery job etc. are not taken into account. Be aware that for this scheduling type the job is released such that it is defined at the start time in the BatchMan master data.

For the authorization maintenance of the user jobs, you require the J5H_USRJOB_U or J5H_USRJOB_A authorization for the J_5H authorization object.

3.5. Monitoring the user job queue

The monitoring for the user job queue is included in the BatchMan® client transport, i.e. you can execute it also on all BatchMan® client systems in addition to the master. You can access monitoring using Transaction J5H1_UJ4. Alternatively, you can access it for all BatchMan master systems via the BatchMan®-Function tree → Monitoring → Other Monitors → Monitoring user jobs.

Monitoring is divided into two operating modes, depending on the respective authorization of the user. User job administrators have the J5H_USRJOB_A authorization for the J_5H authorization object; user job users require the J5H_USRJOB_U authorization.

User job administrators can monitor all user jobs in the entire system landscape.

User job users in contrast can only display their own user jobs for their local system; they skip the selection screen shown above.

On the right side of the selection screen, you can select the systems whose user job queue you want to display.

On the left side, you can define other selection criteria, such as the job creator, target system where the jobs run, status, etc.

User jobs distinguish between seven different statuses:

released: Job is released and is waiting for the scheduler run

active: Job is started and **active**. This status remains until the scheduler detects the **finished** status. It is thus possible that, depending on the scheduler period, the state remains longer than in the standard SAP system (SM37). As soon as the job goes to the **active** status, the instance where the job is running as well as the start time are known and transferred to monitoring.

finished: The job is ended successfully

aborted: the job is ended with errors
in the job log, you can find one indication as to the possible error

- locked:** in monitoring, you have the option of locking jobs
Jobs in this status remain untouched in this status until they are unlocked or deleted
- faulty:** This status indicates an error in the job definition. The scheduler tries a maximum of three times to schedule a job via the XBP 2.0 – interface. Afterwards, the Job goes into the **faulty** status and remains untouched in this status until it either is unlocked or deleted. After it is unlocked, the job then gets three scheduling attempts. Prior to unlocking, you should find and eliminate the reason for the faulty scheduling attempts. You can find more information on possible causes in the SYSLOG via Transaction SM21.
- no authority:** Jobs are placed into this status if you do not receive user job authorization for scheduling. You then have the option to release the job manually, change the authorizations (cf. Section 3.3 User jobs authorization concept) or to delete the job.

BM: Userjob Queue HOD_000 22.06.2007 15:16:07 AR: 15 sec.											

If you monitor several master systems at the same time, you can select these on the left side of the page. Using the  pushbutton, you can hide these selection options for several master systems. For the status change to occur you have to update the job overview; you also have the option to set the automatic update at the same time. Under the Settings → Auto-refresh menu option, you have the option to maintain the auto refresh properties.

	Update job list
	Create new user job (cf. Section 3.4 Manual user job scheduling)
	Display job
	Edit job
	Delete job
 Steps	Display job steps
 Spool	Display spool list
 Log	Display job log
	Lock job (status locked)
	Unlock, release job (possible for status locked, no authority, faulty)
	Change layout

Some of these functions require a simple or multiple job selection.

Certain functions (e.g. edit job, display spool list, etc.) which are to be executed for jobs that run on other target systems, require a logon for this system, so that any changes made are carried out under the actual user.