



BatchMan

Manual BatchMan NonSAP Agent

Produktinfo und Support

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1. BatchMan Agentless

1.1. General Information

Using BatchMan, you have the option to carry out non-SAP processing without BatchMan having been installed on the target computer. For this, BatchMan may use the following protocols, which must be available on the target computer.

Command and script execution

SSH:

- Secure Shell
- Encrypted
- De facto standard
- Across OS

Telnet:

- Only for Windows clients
- Unencrypted
- Standard

WMI:

- Windows Management Instrumentation
- Communication only between Windows
- Encrypted
- Only command transfer, no output

Filehandling

SFTP:

- SSH File Transfer Protocol
- Encrypted
- De facto standard for encrypted file transfer
- Across OS

SMB, SAMBA:

- Server-Message-Block-Protocol
- Encrypted (but only authentication)
- Across OS
- Standard (under Windows file release)

BatchMan transfers the commands via the ServerExec interface on the local JRE (this may have to be installed additionally www.java.com).

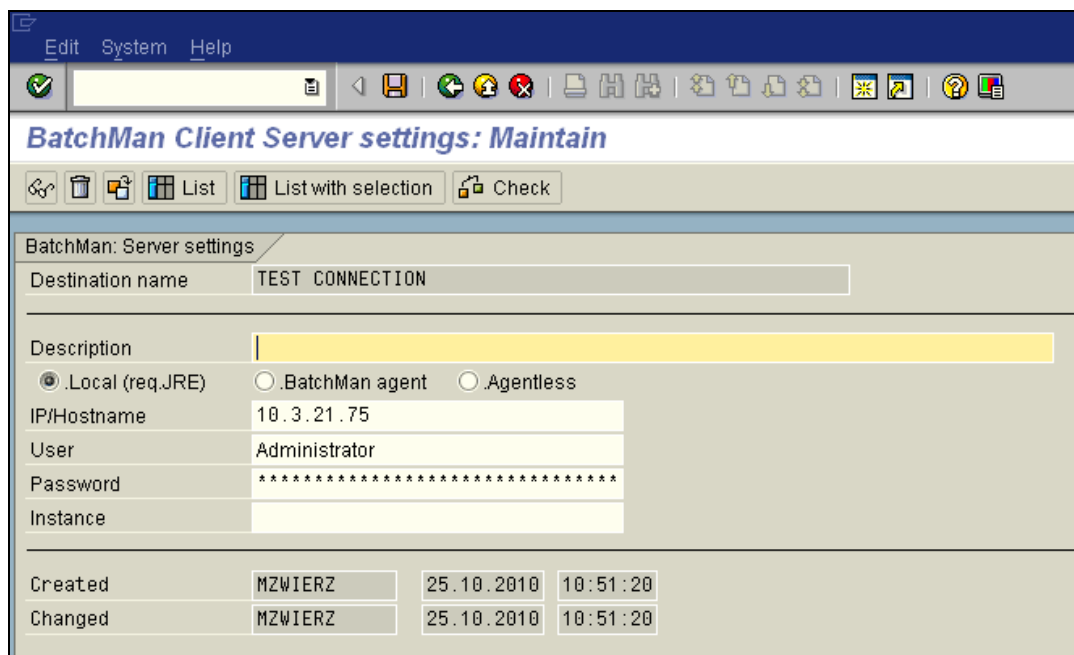
Contingent upon the command transfer via the ServerExec, processing is always done synchronously; that means the corresponding SAP work process is retained until non-SAP processing has ended and the results logs are available.

1.2. Setting up systems without BatchMan Agent

To get to the system set up, choose:

BatchMan®-Function tree → Customizing → Basis Customizing → Definition of non-SAP servers

Here you can maintain the links to your BatchMan Agents.



BatchMan Client Server settings: Maintain

BatchMan: Server settings

Destination name: TEST CONNECTION

Description:

☒ .Local (req.JRE) ☐ .BatchMan agent ☐ .Agentless

IP/Hostname: 10.3.21.75

User: Administrator

Password: *****

Instance:

Created: MZWIERZ 25.10.2010 10:51:20

Changed: MZWIERZ 25.10.2010 10:51:20

As the type, select “Local (req.JRE)”

If the authorization takes place via a domain user, then write the domain followed by a semicolon and the corresponding user name into the User name field. (For example: Domain; User).

Under “Instance”, you can choose an instance or server group to be used to process commands. This is mainly recommended if the ServerExec link (SM59) is not maintained for all instances or a JRE is not available for all instances.

Using the Check button, you can verify whether the command transfer ServerExec to JRE is successful; the system does not check the login data here since this may be dependent on protocols.

1.3. Command and script execution and file handling

For non-SAP processing, you can use the following reports:

/BTCMAN/C_SSH	- Command execution via SSH
/BTCMAN/C_WMI	- Command execution via WMI
/BTCMAN/C_TNT	- Command execution via Telnet
/BTCMAN/C_SFTP	- File transfer via SFTP
/BTCMAN/C_SMB	- File transfer via SMB
/BTCMAN/M_FTL	- Scan text files
/BTCMAN/M_FTG	- File trigger

You can also set up non-SAP file triggers using the start criteria of jobs and networks. The first five reports are also available on the BatchMan client systems; these get the respective non-SAP links from the master system via the link to the master system set in the J_5H1SEC report.

2. BatchMan Agent

2.1. General Information

BatchMan agent is implemented in Java and is thus portable for each operating system that supports Java > 1.4 (<http://java.com/download>).

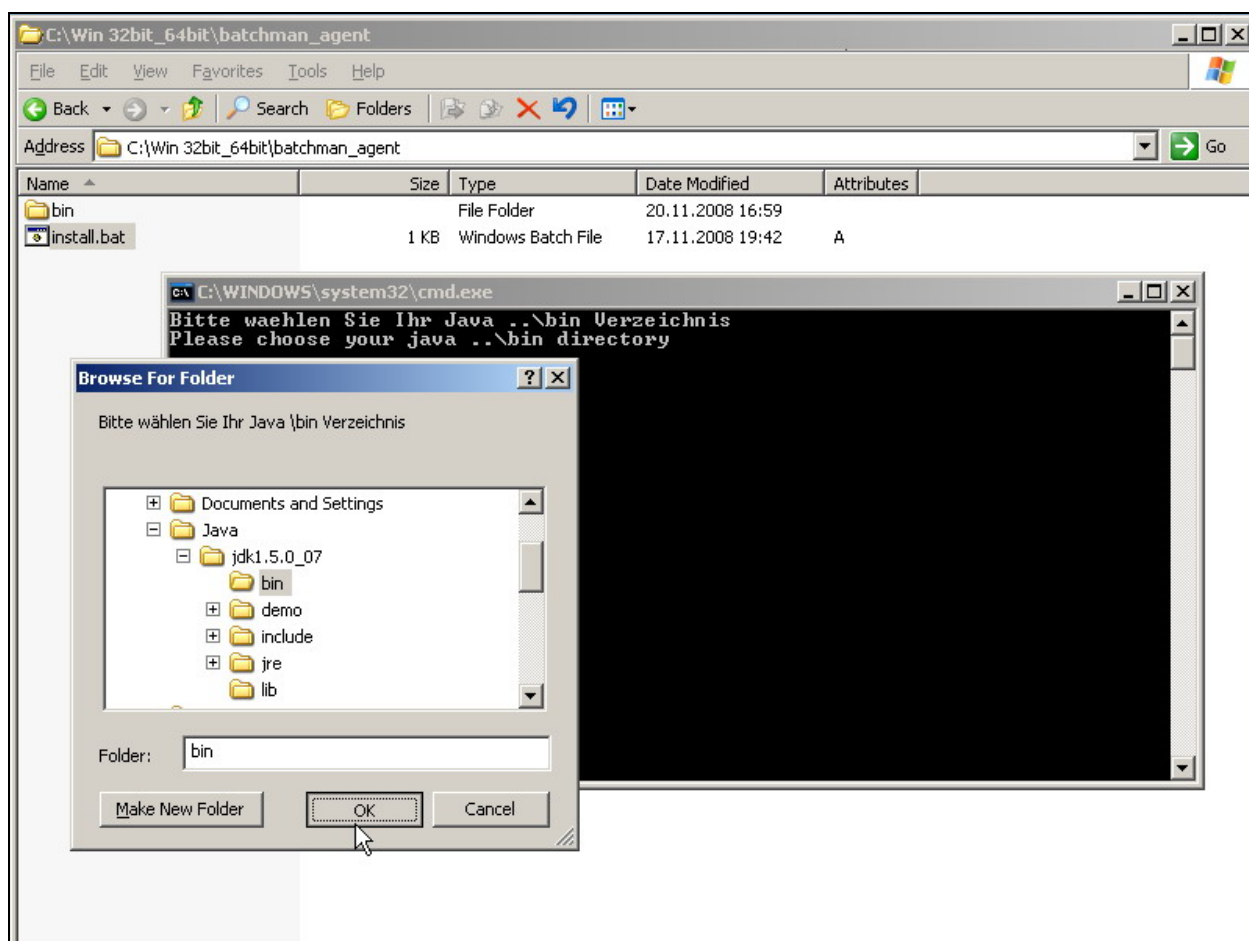
Communication between agent and SAP system is encrypted and via http. Note that firewall settings between communication partners may impact this process.

2.2. Agent installation in Win 32bit, 64bit

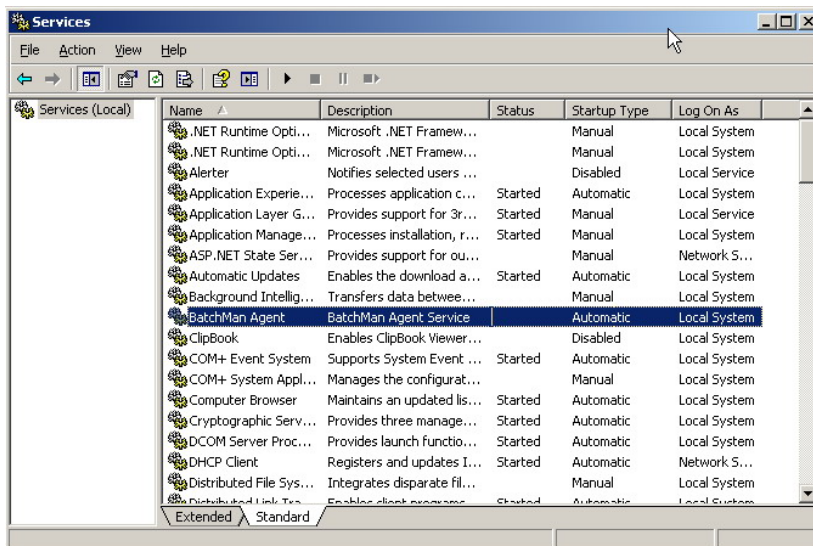
Unpack the attached zip file into a corresponding work directory on the desired computer on which the agent is to run later. Make sure that the directory structure is retained. You should select a directory that has no blanks in the entire path.

Then switch to the directory created and execute install.bat to start the installation.

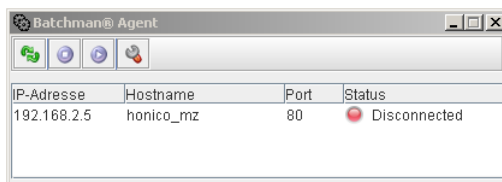
On the following dialog box, select the bin directory of your JAVA installation and confirm it.



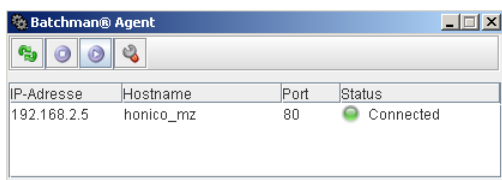
After successful installation, a utility called BatchMan Agent is set up. You also have a link called BatchMan Agent Monitor on your desktop.



Start the link created to start the Agent Monitor.



Click right on the tool symbol then select a port and password under which BatchMan Agent is to run later. Confirm your setting by clicking on SAVE. Then you can start the BatchMan Agent via the Play symbol.



The Agent is now active (LED is green).

If you like, you can close the monitor now (using the X on the upper right).

You can restart it at any time via the link on your desktop. The BatchMan Agent runs as a utility and thus remains active even when you logoff the system.

2.3. Agent installation in Unix/Linux 32bit, 64bit

Copy the BatchMan Agent directory into a respective work directory. To start the BatchMan Agent monitor, enter the following command in a shell:

```
[JAVA_HOME]/java -jar [WORKDIR]/batchman_agent/bin /batchman_agent.jar &
```

In this case, replace [JAVA_HOME] with your respective Java installation directory [WORKDIR] with the work directory selected above.

For instance:

```
/usr/java/jre1.6.0_10/bin/java -jar /root/work/batchman_agent/bin/batchman_agent.jar &
```

For your BatchMan Agent Monitor, you can also create a link that starts the Monitor by just double-clicking.

For this, open an editor and enter the following text:

[Desktop Entry]

Name=BatchMan Agent Monitor

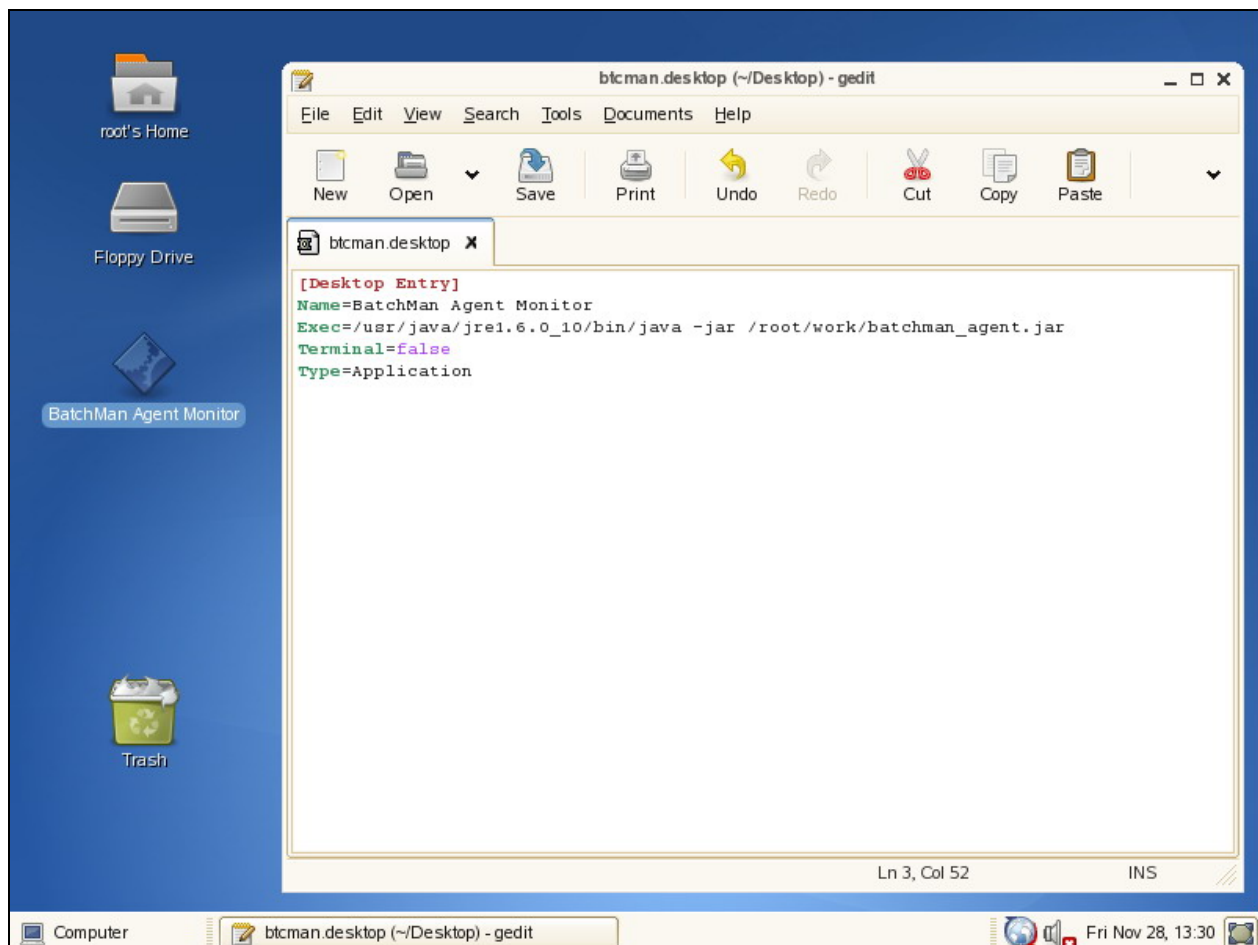
Exec=[JAVA_HOME]/java -jar [WORKDIR]/batchman_agent/bin/batchman_agent.jar

Terminal=false

Type=Application

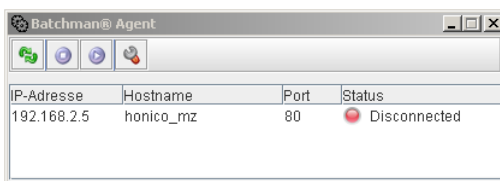
In this case, replace [JAVA_HOME] with your respective Java installation directory [WORKDIR] with the work directory selected above.

Save this text file under the name batchman.desktop in your desktop folder, for instance.

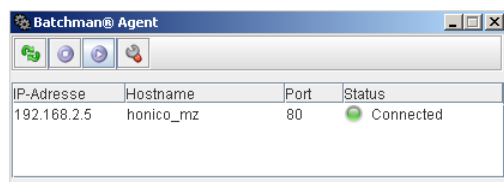


You will then receive a link, in this case, on the desktop.

To start the Agent Monitor, start the link created or the shell command described above.



Click right on the tool symbol then select a port and password under which BatchMan Agent is to run. Confirm your setting by clicking on SAVE. Now you can start the BatchMan Agent via the Play symbol.



The Agent is now active (LED is green).

If you like, you can close the monitor now (using the X on the upper right).

You can restart it at any time via the link on your desktop.

The BatchMan Agent runs under nohup thus remaining active even without a shell or after a logoff.

2.4. Setting up systems with BatchMan Agent

To get to the system set up, choose:

BatchMan®-Function tree → *Customizing* → *Basis Customizing* → *Definition of non-SAP servers*

Here you can maintain the links to your BatchMan Agents.

BatchMan Client Server settings: Entrance

BatchMan: Server settings

Destination name:

Description:

☐ .Local (req.JRE) ☐ .BatchMan agent ☐ .Agentless

IP/Hostname:

User:

Password:

Instance:

Created: 00:00:00

Changed: 00:00:00

Enter any link name and click left on the Create button (F5).

As the type, select BatchMan Agent. Enter IP/host name, port and the password defined in the Agent (cf. 1). If the Agent can only be reached by proxy, maintain the corresponding fields also. Click on Save and then Check. If the status is green, the link is successful.

BatchMan Client Server settings: Maintain

BatchMan: Server settings

Destination name: TEST COMPUTER Status: ☒ ON

Description:

☐ .Local (req.JRE)
 ☒ .BatchMan agent
 ☐ .Agentless
 ☐ Server group

IP/Hostname: 10.3.21.75 ☐ HTTPS

Port: 90 ☐ Proxy

Password: *****

Created: MZWIERZ 25.10.2010 11:00:34
 Changed: MZWIERZ 25.10.2010 11:00:34

2.5. Setting up load distribution and failsafe

If you have installed BatchMan Agent on a second system and you want load distribution or failsafe with this system, enter the second system like the system described above.

BatchMan Client Server settings: Maintain

BatchMan: Server settings

Destination name: TEST COMPUTER 2 Status: ☒ ON

Description:

☐ .Local (req.JRE)
 ☒ .BatchMan agent
 ☐ .Agentless
 ☐ Server group

IP/Hostname: 10.3.21.76 ☐ HTTPS

Port: 80 ☐ Proxy

Password: *****

Created: MZWIERZ 25.10.2010 11:02:17
 Changed: MZWIERZ 25.10.2010 11:02:17

Then you have the option to combine these systems.

For this, select a new link name and click on the Server group field.

You then have the option to combine several defined links in one group. For this, select the corresponding links with the desired load distribution share. If a system is only to be used as a failsafe, it must be given a load distribution share of 0%. This system will then only be used if all other systems have failed or can no longer be reached.

BatchMan Client Server settings: Maintain

BatchMan: Server settings

Destination name: LOAD

Description:

☐ .Local (req.JRE)
 ☒ .BatchMan agent
 ☐ .Agentless
 ☒ Server group

Destination name	Load distribution perc(%)
TEST COMPUTER	033
TEST COMPUTER 2	067

Created: MZWIERZ 25.10.2010 11:04:31
 Changed: MZWIERZ 25.10.2010 11:04:31

2.6. Set up: Systems without BatchMan Agent

If you want to submit jobs for systems on which is no BatchMan Agent is installed, you have the option to maintain an agentless link.

These systems are then used via another system that has a BatchMan Agent.

The command transfer then looks like this:

SAP -> BatchMan Agent -> System without BatchMan Agent

Communication between BatchMan Agent and the system without a BatchMan Agent can be carried out via an available protocol (SSH, Telnet, WMI), which must be available on the system without the BatchMan Agent.

To set up, select a link name and then click on Agentless. Define the BatchMan client (agent used for the link), as well as the IP, user and password for your system with no BatchMan Agent installed. In this case, the user name and password are used for the later logon via the available protocol (SSH, Telnet, WMI) and may have to be administered separately on the target computer for this utility.

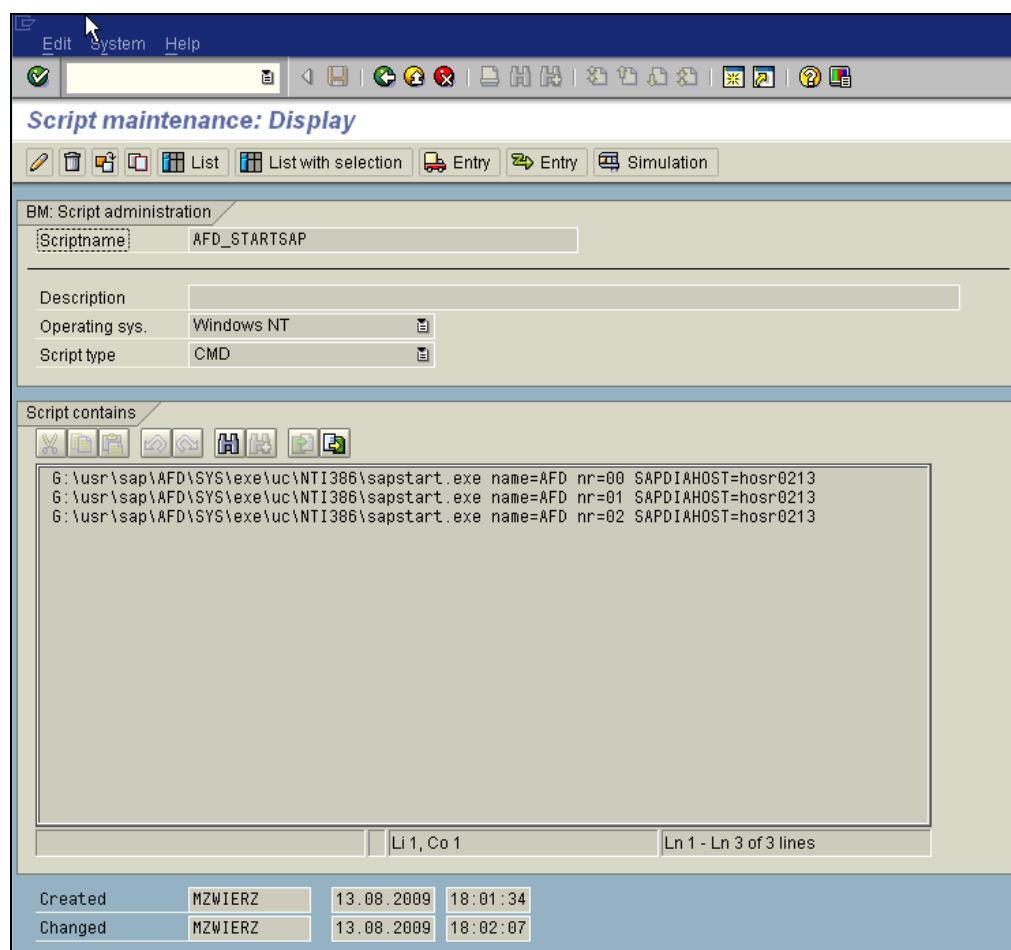
The screenshot shows the 'BatchMan Client Server settings: Maintain' dialog box. It has a menu bar with 'Edit', 'System', and 'Help'. Below the menu bar is a toolbar with various icons. The main area contains the following fields and options:

- BatchMan: Server settings** (tab)
- Destination name:** REMOTE COMPUTER
- Description:** (empty text field)
- Options:** ☐ .Local (req.JRE), ☐ .BatchMan agent, ☒ .Agentless, ☐ Server group
- BatchMan Client:** TEST COMPUTER
- IP/Hostname:** 10.3.21.18
- User:** Administrator
- Password:** (masked with asterisks)
- Created:** MZWIERZ, 25.10.2010, 11:06:29
- Changed:** MZWIERZ, 25.10.2010, 11:06:29

2.7. BatchMan script administration

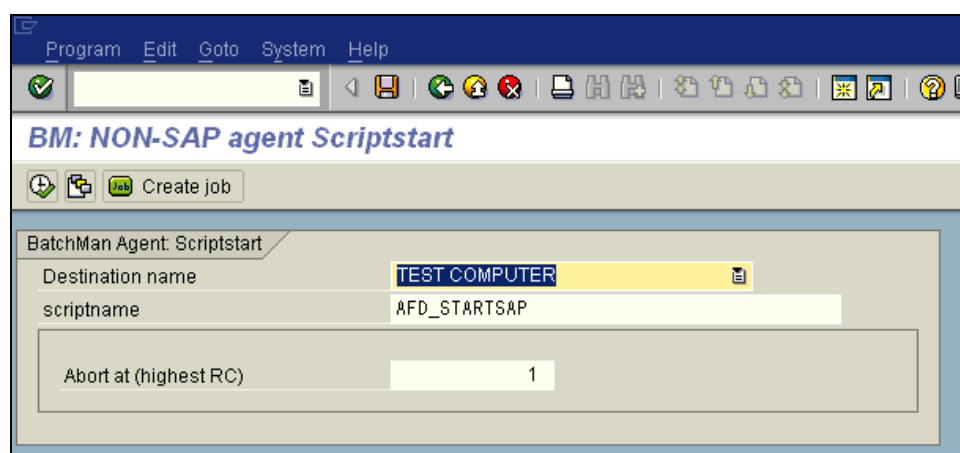
Via **BatchMan®** *Function tree* → *Master data / Library* → *Script administration* → *Script maintenance*

You have the option to maintain scripts in BatchMan.



These scripts are saved in BatchMan and copied during the runtime to the Agent system and started there.

Using the “Test run” button, you can execute the script; or you can use the “Create job” function to generate a BatchMan job in the master data by entering a job name.



To start BatchMan script, use the /BTCMAN/M_AGS report.

2.8. Maintain shell commands

To execute commands, use the /BTCMAN/M_AGT report.

BM: NON-SAP agent command

Switch selection screen

Destination name: TEST COMPUTER

Input command and parameters

Command: ipconfig -all

Separate lines with space: ☐

Abort at (highest RC): 1

As the link name, select the desired target system for the execution.

Then you can enter the command. In "Aborted from (largest RC)" you can determine from which exit code the job is treated as aborted (default 1, so RC < 1 means finished, RC >= 1 means aborted).

If you selected an Agentless link as link name or Agentless link group, you also have to select the desired shell protocol.

Agentless Shell Protokoll

☒ .SSH ☐ .WMI ☐ .Telnet

2.9. Execute shell commands

When you have filled in all the fields, the command can be executed. The execution is carried out in the dialog mode synchronously, in the background (only possible via BatchMan) asynchronously (report replaces command or script call and ends without waiting for the execution to end, BM master job checks and sets the status).

For the execution in the background, you have to save the values entered as variants and then define the report using a step in a job as a default.

In monitoring, there are two more distinctive features.

1.  The job log is STDOUT or STDERR of the executing shell in this case.
2.  Jobs that run directly on a BatchMan Agent may be aborted, that means the executing shell instance is terminated.

2.10. Import shell commands

You have the option of importing commands via a file (CSV).

The structure of the file looks like this:

Job name; Step name; Variant name; Command or script; Job description

For instance:

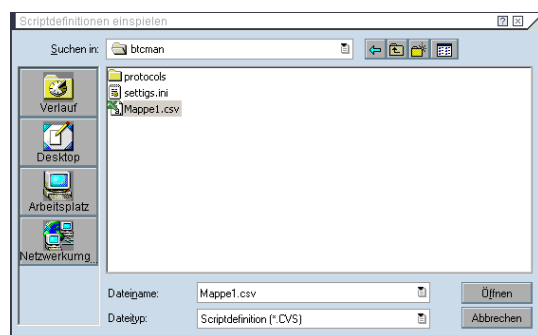
Jobname_test1;Stepname_test1;Variantenname_test1;script_test.cmd hello world;Test

Jobname_test2;Stepname_test2;Variantenname_test3;ipconfig -all;Test

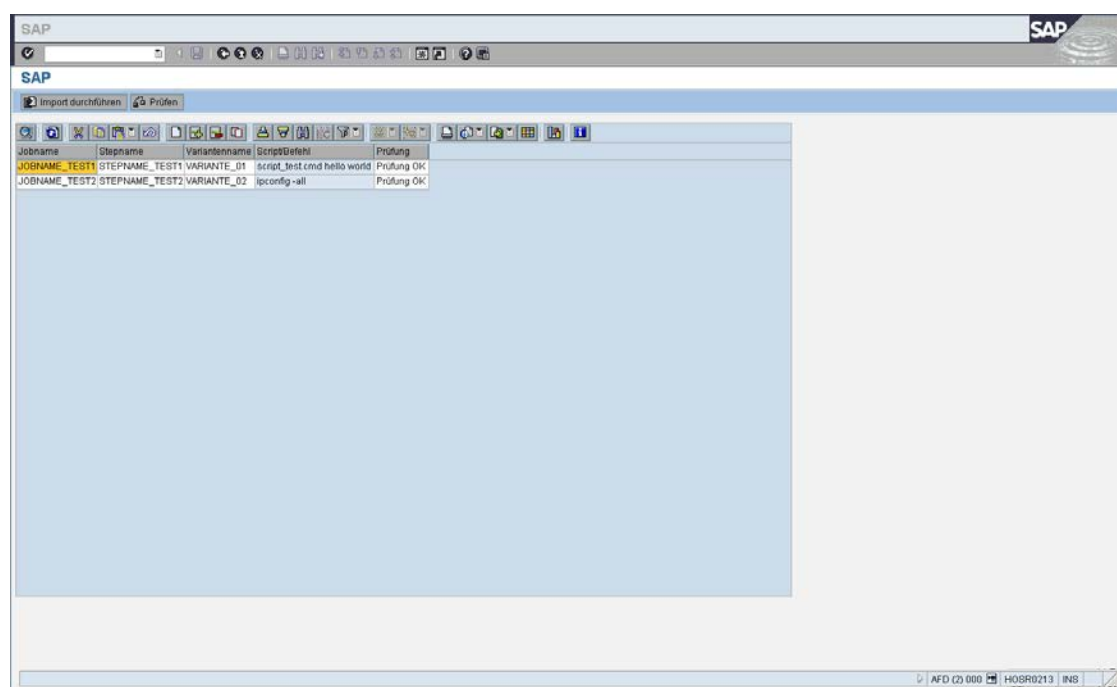
You can get this kind of a file via EXCEL -> Save under -> CSV.

Column 1 contains the job name to be generated; column 2 contains the step name to be generated; column 3 contains the variant name to be generated for the /BTCMAN/M_AGT report; column 4 contains the script or command call.

You can import this file via the /BTCMAN/M_NIM report. For this, start the report; on the first screen, select the executing target system desired, then choose Execute.



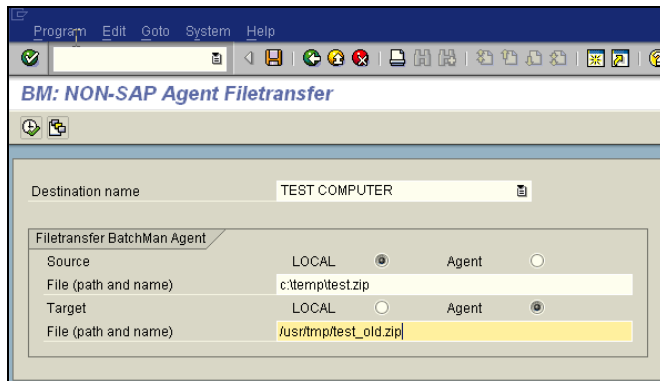
Select your CSV file and choose Open.



If the check is OK, you can start the import. As a result, you receive a fully defined job, which can start the script or command execution assigned to it.

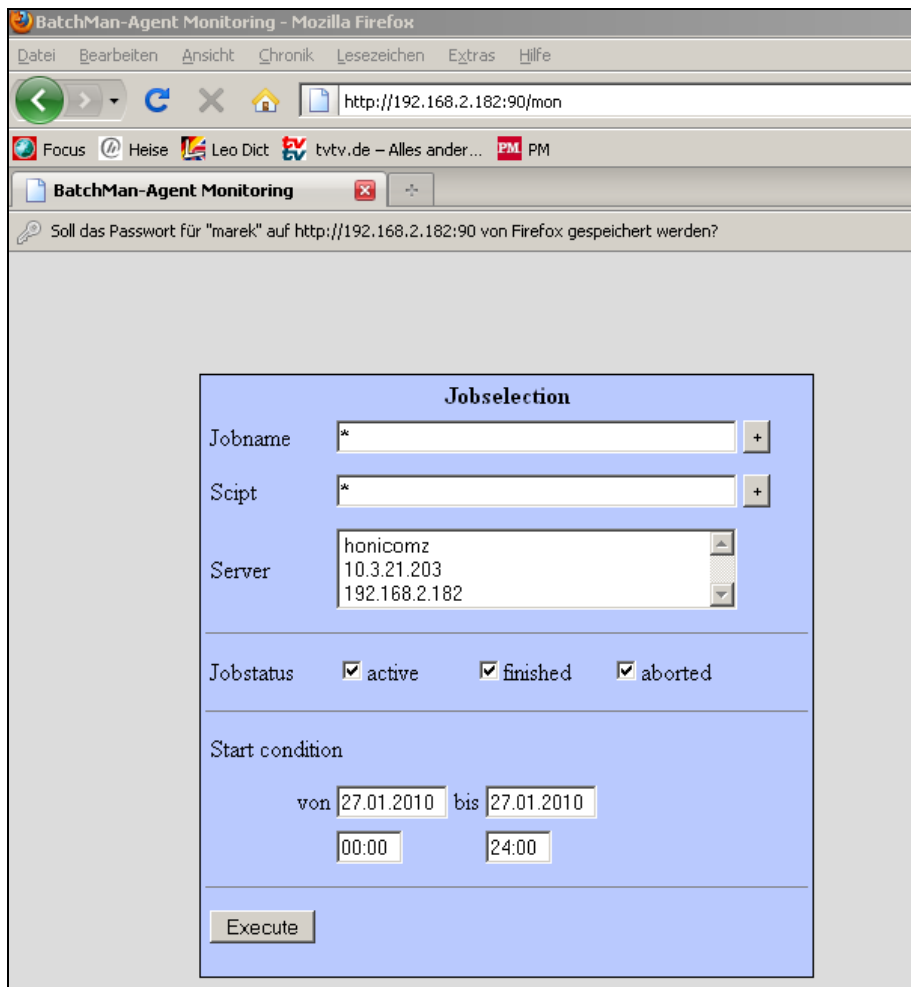
2.11. Filehandling

You can also use links to a BatchMan Agent for file transfer and file triggering. Basically, you can set up file triggering via the start criteria for jobs and networks. For file transfer to a BatchMan Agent, use the /BTCMAN/M_AFT report.

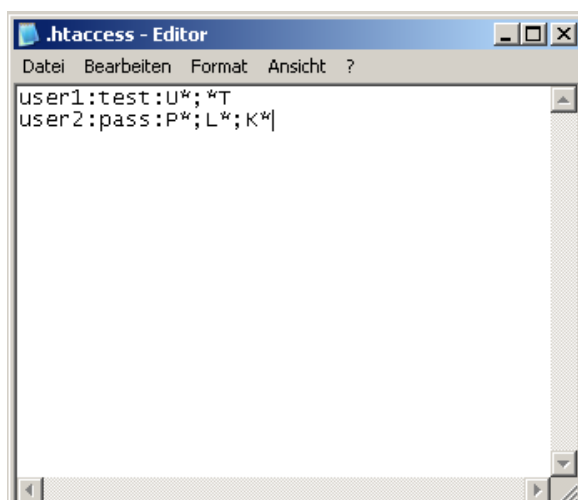


2.12. Non-SAP Monitoring

Under [http://\[AGENT-IP\]:\[AGENT-PORT\]/mon](http://[AGENT-IP]:[AGENT-PORT]/mon) there is a non-SAP monitoring for all commands and scripts triggered as a BM job (/BTCMAN/M_AGS and /BTCMAN/M_AGS). If you use port 80 as the default, you do not have to enter a port.



In the `/bin/btcmn/` directory, create a file with the `.htaccess` name to administer users and authorizations for the monitoring.

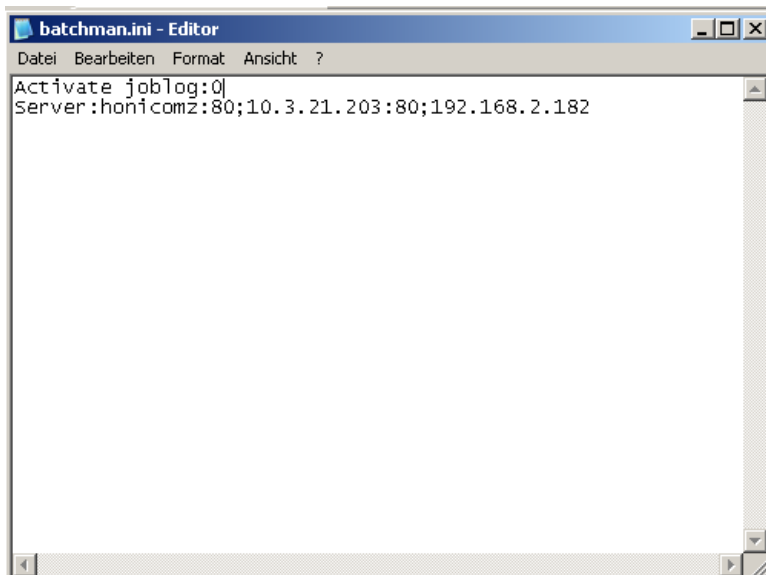


In the `.htaccess` file, you can make entries in this manner:

User: Password:[Job sample];[Job sample]

Here, entering job samples is optional; for a user, you can predefine job names that are displayed to that user in monitoring. Job names that do not correspond to this sample then remain hidden.

If you want to monitor several non-SAP agents, you can make them known in the batchman.ini file in the /bin/ directory so that they appear later for monitoring in the selection.



Make the entries in this manner:

Server:[Server]:[Port];[Server]:[Port]

For port 80, the entry is again optional.

BatchMan Agent Monitoring - 39 jobs founded - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

Focus Heise Leo Dict tvttv.de - Alles ander... PM PM

BatchMan Agent Monitoring - 39 ...

Jobname	Status	Server	Start	Time	End	Time -	Duration(sec)	Script
MAREK_L.NONSAP_TEST	active	honicomz	05.01.10	13:47:35	27.01.10	14:57:52	1905017	cmd /c C:\Sicherung\btcm\btcm @MAREK.cmd
MAREK_L.NONSAP_TEST	active	honicomz	05.01.10	14:09:55	27.01.10	14:57:52	1903677	cmd /c C:\Sicherung\btcm\btcm @MAREK.cmd
MAREK_L.NONSAP_TEST	active	honicomz	05.01.10	14:15:25	27.01.10	14:57:52	1903347	cmd /c C:\Sicherung\btcm\btcm @MAREK.cmd
MAREK_L.NONSAP_TEST	active	honicomz	05.01.10	14:18:29	27.01.10	14:57:52	1903163	cmd /c C:\Sicherung\btcm\btcm @MAREK.cmd
MAREK_L.NONSAP_TEST	active	honicomz	05.01.10	14:22:57	27.01.10	14:57:52	1902895	cmd /c C:\Sicherung\btcm\btcm @MAREK.cmd
Joblog: JJITEESSTT (126443263682884030281868823026)								Print X
JJITEESSTT	25.01.10-16:17:16: C:\Sicherung\btcm\BatchMan>ftp -n -s:c:\la.bt download.intel.com							d /c C:\Sicherung\btcm\btcm DFDD.cmd
JJITEESSTT	25.01.10-16:17:17: Ausföhrlicher Modus EIN .							d /c C:\Sicherung\btcm\btcm DFDD.cmd
JJITEESSTT	25.01.10-16:17:17: verbose							d /c C:\Sicherung\btcm\btcm DFDD.cmd
JJITEESSTT	25.01.10-16:17:17: user Anonymous							d /c C:\Sicherung\btcm\btcm DFDD.cmd
JJITEESSTT	25.01.10-16:17:17: 331 Anonymous access allowed, send identity (e-mail name) as password.							d /c C:\Sicherung\btcm\btcm DFDD.cmd
JJITEESSTT	25.01.10-16:17:17: 230-- Welcome to DOWNLOAD.INTEL.COM!							d /c C:\Sicherung\btcm\btcm DFDD.cmd
JJITEESSTT	25.01.10-16:17:17: -							d /c C:\Sicherung\btcm\btcm DFDD.cmd
JJITEESSTT	25.01.10-16:17:17: - This ftp site is available to users 24 hours a day, seven days a week.							d /c C:\Sicherung\btcm\btcm DFDD.cmd
JJITEESSTT	25.01.10-16:17:17: -							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:17: - For assistance navigating this site please visit http://www.intel.com							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:17: -							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:17: - Guest login OK, access restrictions apply!							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:17: -							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:17: 230 Anonymous user logged in.							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:18: ls							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:18: 200 PORT command successful.							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:18: 150 Opening ASCII mode data connection for file list.							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:18: 404.htm							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:18: apac							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:18: arabic							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:18: au							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:18: bench.data							a bat
MAREK_L.NONSAP_TEST	25.01.10-16:17:18: business							d /c C:\Sicherung\btcm\btcm