



## Short Description of Changes and New Features in BENS OS Vers. 4

BENS OS 2.x	BENS OS 4
Language of the user interface: only English.	Language of the user interface is selectable: German, English, Polish, Russian, Spanish, French, Italian, Chinese and Japanese.
HTML user interface.	Modern WEB- user interface based on Java and Ajax.
Supported printer protocols: LPR /IPP / Socket / SMB.	The protocols supported so far: LPR /IPP / Socket / SMB. IPDS and AFPDS are added, supporting the printing of IBM Hosts. These 2 protocols are always available in the demo-mode, however require a license in other cases.
Single Spool System.	Multi Spool System. Up to Vers. 2.x, all print jobs for different virtual printer form one task queue to be processed. The BENS OS Vers4 offers parallel processing putting every print job in a separate task queue, enabling a gapless, continuous task tracking.
View refreshing with key F8.	Automatic refreshing of the display. For example, when viewing the spooler newly arriving print jobs are at once displayed automatically.
Repeat printing only for print jobs already processed with filters.	Repeat printing possible for already processed jobs as well as for input jobs. This also facilitates testing: printouts can be repeated, e.g. after a filter configuration was altered, without the printout from the application having to be repeated.
No status bar.	Status bar, informing the administrator about the latest events on the server, e.g. filter update etc.
No progress bar with long-term processes (e.g. upload of updates).	Progress bar with long-term processes, e.g. upload of firmware update.



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Print job processing with filters.	In addition to the filters that are permanently integrated into the defined processing methods for print jobs, further programs are available, so-called plugins of the type converter and tools. Plugins can - like filters - be subsequently uploaded onto the BENS Server. Converters serve the parallel conversion of the print job into other formats (e.g. into the PDF format). Tools, however, enable the implementation of an additional print job administration type (e.g. the monitoring of a share, the administration of a follow me system, etc.).
Stopping printing on a target device not supported.	Printers can be paused. Application jobs then are accepted but not transmitted to the target system. This prevents the overflow of a printer hard disk and allows a more efficient process analysis.
Stopping of virtual printers not supported.	Virtual Printers can be paused. Print job on paused printers will be accepted, but not processed. They will be viewed in the spool queue of incoming jobs. Virtual printers can also be disabled. In this case print jobs are no longer accepted from the disabled virtual printer.
New start only possible after pulling the plug.	In BENS OS4, a server restart as well as the shutting down of the server is possible from the user interface.
No back arrow in navigation.	The navigation in BENS OS4 was designed in such a way that many views are inter-linked. In the view „Virtual Printers“, for example, it is possible to click on the associated printer and, directly reach the view of the target printer. Back arrows are also available.
No navigation icons. Sub-menus can be reached only thru the main menu.	The icons for different administration modules are always available in view and can be clicked from every view. This, in addition, facilitates Navigation.



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Detail view of the resources allows no drawbacks on their usage.	From the detail view of the resources it can be viewed immediately, to which other resources they are linked and where they are used. For example, from the detail view of a printer, it can be seen immediately to which virtual printers it is linked. The same is also true for virtual printers, filters and configurations.
One spool view for all print jobs.	The spool overview is separated into incoming print jobs, print jobs in process, cached print jobs designed for subsequent printouts and archived print jobs. This facilitates the search, analysis, and reprints.
Editing of the filter configurations only possible offline.	The filter configurations can be edited offline as well as online, directly on BENS.
No NTP server support.	The specification of up to 3 NTP Servers is supported for time synchronization.
One log file, listing all events chronologically.	Detailed log files enabling a complete and gapless tracing of a print job.
Master / Slave configuration includes no parameters that can be used for establishing the event of a server failure.	The Master / Slave configuration can be set more exactly by the administrator, for example by setting a time period after which a server failure has to be assumed.
SNMP for all printers can simultaneously be switched on or off.	The SNMP protocol can be set on each particular printer level, by specifying community and index.
Fixed settings for checking the availability of target devices.	3 levels can be defined independent from each other by which the availability of the printer can be checked: SNMP, TCP and Ping.
Simple SNMP communication for determining the availability of the printer.	Via SNMP detailed printer queries can be set, for example paper jam, toner, etc.
No SSL support.	In addition, a safe connection between the browser and the server is supported via SSL.



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E-Mail message only in case of Master or Slave failure.	The administrator can define different events that automatically generate an E-Mail message submitted by BENS, for example when a printer is not available over a period of time.
No communication with the Active Directory.	From Windows Server Version 2008, communication with the Active Directory is supported.
No support of the FTP protocol.	Saving the data on an FTP-Share is supported.
No support of samba shares	Saving the data on Samba-Share is supported.
No dashboard	A dashboard for virtual versions and for the G4 platform is available for the administrator, showing at a glance the capacity of the resources, the most important settings and statistics.
No Tool repository	Support Tool Repository with useful programs for download, like BensFinder, Putty, PSCP, TeamViewer, Filter Configurators, MacroGenerator Enterprise etc.
Two G3 Hardware Versions: 2GB SSD and 40GB SSD	1 G4 Hardware Version with 32GB SSD
G3 Hardware RAM: 1GB	G4 Hardware RAM: 2GB
1 license for Barcode and 1 license Unicode Filter preinstalled	No preinstalled Filter licensed



## BENS OS4

A screenshot of the BENS OS4 login window. The window has a dark grey background. It contains three input fields: 'Name' with the text 'admin', 'Password' (empty), and 'Language' (a dropdown menu). The dropdown menu is open, showing a list of languages: 'english' (highlighted in blue), 'deutsch', 'polski', 'русский', 'español', 'français', 'italiano', '中文', and '日本語'.

Name	admin
Password	
Language	english deutsch polski русский español français italiano 中文 日本語

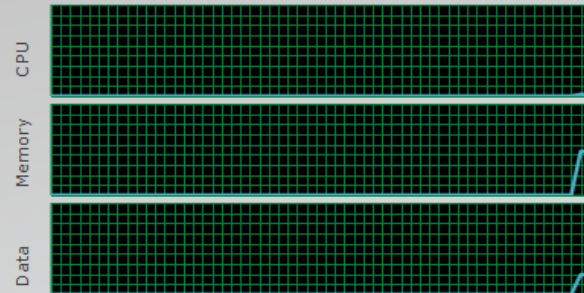
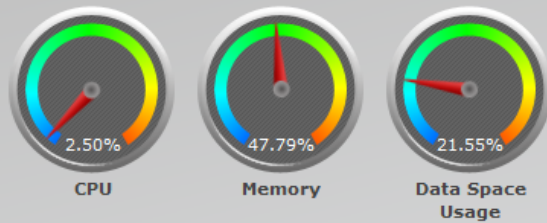
BENS Login Window with language selection



# BENS OS4

## System Dashboard

### System Performance



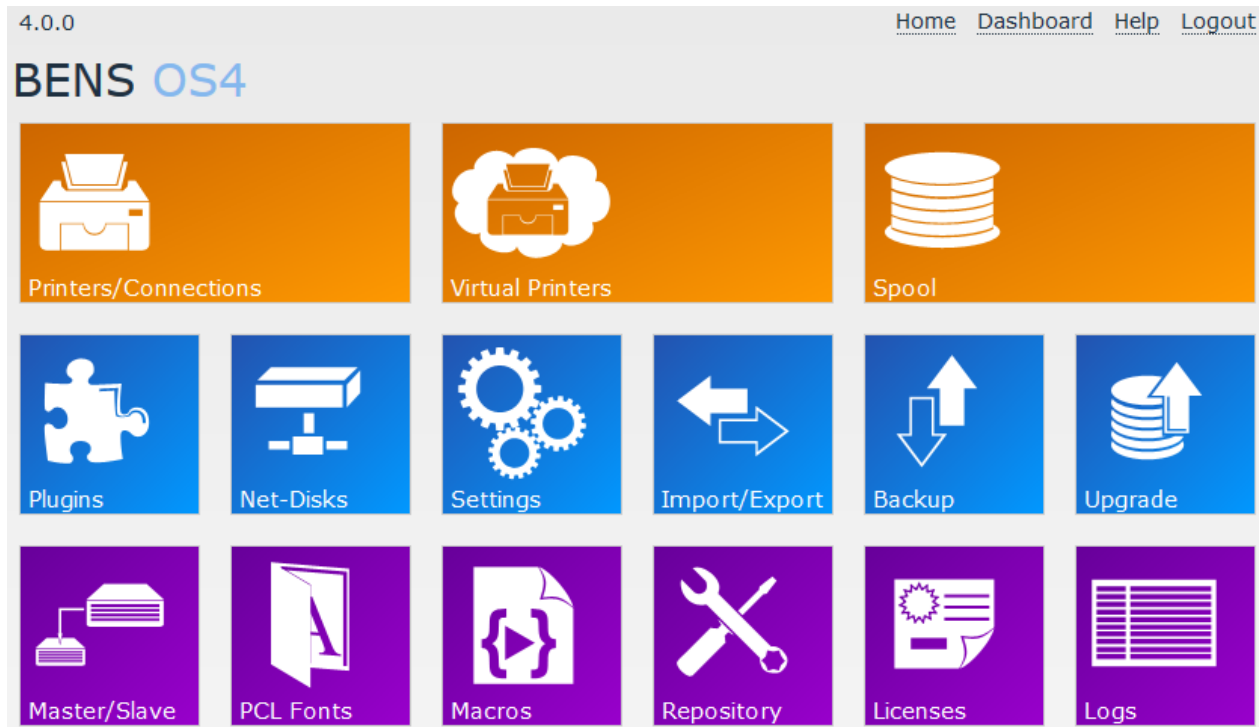
### System Information:

<b>CPU Info:</b>	Intel(R) Xeon(R) CPU E5506 @ 2.13GHz	<b>MAC-Address:</b>	00:50:56:8D:89:EC
<b>No. of CPU's:</b>	2	<b>IP-Number:</b>	192.168.1.34
<b>Memory:</b>	499 MB	<b>OS Version:</b>	4.0.0
<b>Total System Space:</b>	1007.9 MB	<b>BENS API Version:</b>	4.0.18687
<b>Free System Space:</b>	188.95 MB	<b>Bens Slave IP-address:</b>	
<b>Total Data Space:</b>	2.46 GB	<b>Samba Workgroup:</b>	WORKGROUP
<b>Free Data Space:</b>	1.93 GB	<b>Samba Name:</b>	BENS
		<b>System Time:</b>	2014-06-05 15:03:53

### Statistics

<b>Number of installed filters:</b>	10	<b>Number of defined printers/connections:</b>	6
<b>Number of installed macros:</b>	4	<b>Last Backup (days ago):</b>	2
<b>Number of installed fonts:</b>	1	<b>Mode:</b>	standalone
<b>Number of defined virtual printers:</b>	7	<b>Last Sync Time:</b>	















**BENS Dashboard (not available on G3 platform)**




BENS HOME with modern interface



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BENS OS4              

 **Settings**

**Network** | Samba | System Time | SMTP | Jobs | System | Advanced

**Network**

Enable DHCP

IP Address

IP Mask

Gateway

DNS 1

DNS 2

DNS 3


Search Domain


BENS Settings Module with tabulated tabs, grouping various settings.





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BENS OS4 

 **Settings**

**Network** **Samba** **System Time** SMTP Jobs System Advanced

**NTP**

Enable NTP

Server 1

Server 2

Server 3

Status off

Time 2014-06-05 15:04:45

NTP Info

BENS Settings Module - NTP Server Settings



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BENS OS4



## Printers/Connections

[+] Add Printer/Connection

1 (1)

	ID	Type	Name	Host	Queue/Port	Status	Operations
[+]	1	socket	Socket Printer C280	192.168.1.118	9100	● (idle)	<input type="button" value="..."/> <input type="button" value="⏏"/>
[+]	2	socket	Socket Printer HP	192.168.1.104	9100	● (idle)	<input type="button" value="..."/> <input type="button" value="⏏"/>
[+]	3	disk	Disk on BENS			● (online)	<input type="button" value="..."/> <input type="button" value="⏏"/>
[+]	5	ipp	IPP Printer	192.168.1.118	xyz	● (idle)	<input type="button" value="..."/> <input type="button" value="⏏"/>
[+]	6	socket	km40P	192.168.1.105	9100	● (no_paper)	<input type="button" value="..."/> <input type="button" value="⏏"/>
[+]	7	lpr	LPR C280	192.168.1.118	xyz	● (idle)	<input type="button" value="..."/> <input type="button" value="⏏"/>

### BENS Printer Overview



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**BENS OS4**

**Printers/Connections**

[+] Add Printer/Connection

1 (1)

	ID	Type	Name	Host	Queue/Port	Status	Operations
[-]	1	socket	Socket Printer C280	192.168.1.118	9100	● (idle)	<input type="button" value="..."/> <input type="button" value="⌂"/>

**Information** **Edit** **Advanced**

**Description:** KM C280 (Farbe)

**Assigned Virtual Printers**

















Name	Type	Queue/Port	Description	Operations
V_SMB	smb	share	Accept job with SMB	<a href="#">View</a>
V_Socket	socket	9001	Accept job with Socket	<a href="#">View</a>
V_IPP	ipp	ipp	Accept job with IPP	<a href="#">View</a>


[+]	2	socket	Socket Printer HP	192.168.1.104	9100	● (idle)	<input type="button" value="..."/> <input type="button" value="⌂"/>
[+]	3	disk	Disk on BENS			● (online)	<input type="button" value="..."/> <input type="button" value="⌂"/>
[+]	5	ipp	IPP Printer	192.168.1.118	xyz	● (idle)	<input type="button" value="..."/> <input type="button" value="⌂"/>
[+]	6	socket	km40P	192.168.1.105	9100	● (no_paper)	<input type="button" value="..."/> <input type="button" value="⌂"/>
[+]	7	lpr	LPR C280	192.168.1.118	xyz	● (idle)	<input type="button" value="..."/> <input type="button" value="⌂"/>

BENS Printer Definitions with tabulated tabs for different settings.




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





 **Spool**

Archive **Storage** Incoming Jobs Jobs in print

Clear Archive

1 (1)   

-- Select an Action --

<input type="checkbox"/>		ID	Virt. Printer	Printer/Connection	Host	Title	Date	State	Operations
<input type="checkbox"/>	[+]	140196820 3.935957.0 1967	V_LPR	LPR C280	192.168. 1.141	Untitled	2014-06-0 5 13:36:43	printed	
<input type="checkbox"/>	[+]	140196818 5.961553.0 1948	V_LPR	LPR C280	192.168. 1.141	Untitled	2014-06-0 5 13:36:25	printed	
<input type="checkbox"/>	[+]	140196800 6.876568.0 1746	V_LPR	LPR C280	192.168. 1.141	Untitled	2014-06-0 5 13:33:26	printed	
<input type="checkbox"/>	[+]	140196800 4.922113.0 1734	V_LPR	LPR C280	192.168. 1.141	Untitled	2014-06-0 5 13:33:24	printed	
<input type="checkbox"/>	[+]	140196800 2.866825.0 1713	V_LPR	LPR C280	192.168. 1.141	Untitled	2014-06-0 5 13:33:22	printed	
<input type="checkbox"/>	[+]	140196799 2.630135.0 1699	V_LPR	LPR C280	192.168. 1.141	Untitled	2014-06-0 5 13:33:12	printed	

Overview of the Print Jobs with different tabs for viewing the print job according to status.



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BENS OS4

### Spool

Archive Storage Incoming Jobs Jobs in print

Clear Archive

1 (1) Clear 20

-- Select an Action -- Action

ID	Virt. Printer	Printer/Connection	Host	Title	Date	State	Operations
1401968203.935957.01967	V_LPR	LPR C280	192.168.1.141	Untitled	2014-06-05 13:36:43	printed	
1401968185.961553.01948	V_LPR	LPR C280	192.168.1.141	Untitled	2014-06-05 13:36:25	printed	

-- Select a Printer -- Reprint Output Job  
-- Select a Plugin -- Convert

File Name	Last modified	Operations
info	2014-06-05 13:36:27	Download
input	2014-06-05 13:36:25	Download
log	2014-06-05 13:36:27	Download
output	2014-06-05 13:36:26	Download

```

2014.06.05 13:36:25.962 vprinter[1948]: state: incoming
2014.06.05 13:36:25.965 vprinter[1948]: job created:
1401968203.935957.01967
2014.06.05 13:36:25.967 vprinter[1948]: remote mac: 00:50:56:86:79:0e
2014.06.05 13:36:25.968 vprinter[1948]: vprinter queue: lp1
2014.06.05 13:36:25.968 vprinter[1948]: vprinter server: cups
2014.06.05 13:36:25.968 vprinter[1948]: cups args: 144 wsuchy Untitled
1 document-name=hi_pen job-originating-host-name=192.168.1.141 job-wal
l=urn:uuid:22c0b1b8-e295-332b-53b2-b637d4ab0290 /var/spool/cups/d00144
-01
2014.06.05 13:36:25.968 vprinter[1948]: remote host: 192.168.1.141
2014.06.05 13:36:25.968 vprinter[1948]: remote user: wsuchy
2014.06.05 13:36:25.968 vprinter[1948]: job title: Untitled
2014.06.05 13:36:25.968 vprinter[1948]: receiving job
2014.06.05 13:36:25.968 vprinter[1948]: received 7618 bytes
2014.06.05 13:36:25.969 vprinter[1948]: job queued for processing
2014.06.05 13:36:25.970 vprinter[1948]: state: saved
2014.06.05 13:36:26.651 vgm[8574]: vprinter id: 1
2014.06.05 13:36:26.652 vgm[8574]: state: processing
2014.06.05 13:36:26.653 vgm[8574]: processing job
2014.06.05 13:36:26.654 vgm[8574]: vprinter name: V_LPR
2014.06.05 13:36:26.654 vgm[8574]: printer id: 7
2014.06.05 13:36:26.655 vgm[8574]: job size: 7618
2014.06.05 13:36:26.655 vgm[8574]: job is ready for printing
2014.06.05 13:36:26.656 vgm[8574]: state: ready
2014.06.05 13:36:27.078 pgnw[1951]: state: printing
2014.06.05 13:36:27.079 pgnw[1951]: printing job
2014.06.05 13:36:27.080 pgnw[1951]: sending job to lpr printer #7 (sys
@192.168.1.118)
2014.06.05 13:36:27.102 pgnw[1951]: cmd exit code: 0
2014.06.05 13:36:27.103 pgnw[1951]: cmd: /usr/local/bin/rlpr: info: 1
file spooled to sys@192.168.1.118 (pduy (none))
  
```

Refresh

vprinter_name	V_LPR
state	printed
id	1401968185.961553.01948
printer_id	7
vprinter_id	1
vprinter_server	cups
date	2014-06-05 13:36:25
user	wsuchy
host_mac	00:50:56:86:79:0e
vprinter_type	lpr
printer_1_id	7
printer_1_name	LPR C280
printer_name	LPR C280
title	Untitled
vprinter_queue	lp1
host	192.168.1.141
size	7618

Detail View of a print job with infos, log and download links for all created files.



4.0.0 Home Dashboard Help Logout

BENS OS4

Macros

[+] Add / Upgrade Macro

Durchsuchen... Keine Datei ausgewählt.

Description

Upload

Name	Size	Last modification	Description	Operations
[+] TestMacro.pcl5	74.7 KB	2014-02-21 14:35:21	Test Macro PCL5	
[+] TestMacro.pcl6	74.7 KB	2014-02-21 14:34:58	Test Macro PCL 6	
[+] buchhaltung_config.xml	718 B	2014-06-05 15:08:44	Bookkeeping	
[+] rechnung_k_l.pcl6	524.7 KB	2014-06-05 13:40:25	Rechnung	
[+] rechnung_o_l.pcl6	186.2 KB	2014-06-05 15:08:57	Invoices	

Status Bar (in progress : 0 ; finished : 2)

Task Name	File Name	Progress	Estimated Time	Start	Finish	View
macros	rechnung_o_l_l	complete	-	N/A	2014/06/05 15:08:	show
macros	buchhaltung_c	complete	-	N/A	2014/06/05 15:08:	show

The BENS status bar.