



a **DOVER** Company

# Remote Support

A decorative graphic consisting of several overlapping, semi-transparent rectangles in various colors (blue, green, yellow, pink, grey) arranged in a stepped, staircase-like pattern that extends from the bottom left towards the top right of the page.

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# 1 Remote Support description

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MS is a solution provider and, to complete the relationship with our customer, we leverage an efficient two-level technical support.

The different approaches to help our clients are:

- A. Onsite technical support
- B. Remote support

MS has many offices in main regions of the world and to give quick response to any problematics you or your printer can face in the daily work. If it is necessary MS can send a technician directly to the customer company but many times the fastest reply arrive thanks to our **Remote Support system** that is available on all MS printer series (JP and Lario) since day one.

The system has evolved over the years to adopt the most modern technologies to improve the reliability and the quality of the information we can retrieve from our devices, to accelerate the solution of any problems.

## 1.1 Printer compatibility

The Remote Support system is integrated in the printer produced since the 2010.

It is compatible with all MS printers but JP1 and JP2.



It is always possible to upgrade the Firmware software to the latest version available on the MS website, this permit to the customer to receive the best technical support, based on the newest features.

## 1.2 Hardware requirements

This is the list of the requirements:

- MS printer compatible with the Remote support system
- RIP computer connected point-to-point to the printer or a PC station that can access multiple printers
- Internet access

MS-Bridge uses very limited hardware resources so any PC can be used to install it.

## 1.3 Software requirements

MS-Bridge is available on Microsoft Windows 7 and later, Apple macOS 10.9 and later, most of the Linux x64 distributions.

In order to work properly the OS should grant to MS-Bridge the rights to access the network for both outgoing and incoming connections and to access to the internal storage to be able to save the daily backup of the printer parameters.

Depending on the operating system and the policies applied to it the location where the files are stored can vary and sometimes not-so-easy to find but the MS-Bridge provide a shortcut on the menu to open the backup folder.

On macOS the application is completely sandboxed so it has only access to a specific OS-dependent folder and it is not able to access to any resource of the computer rather than the network.

## 1.4 Installation

There are three dedicated installation packages for each supported OS (Microsoft Windows, Apple macOS and Linux), they are available on MS official website.

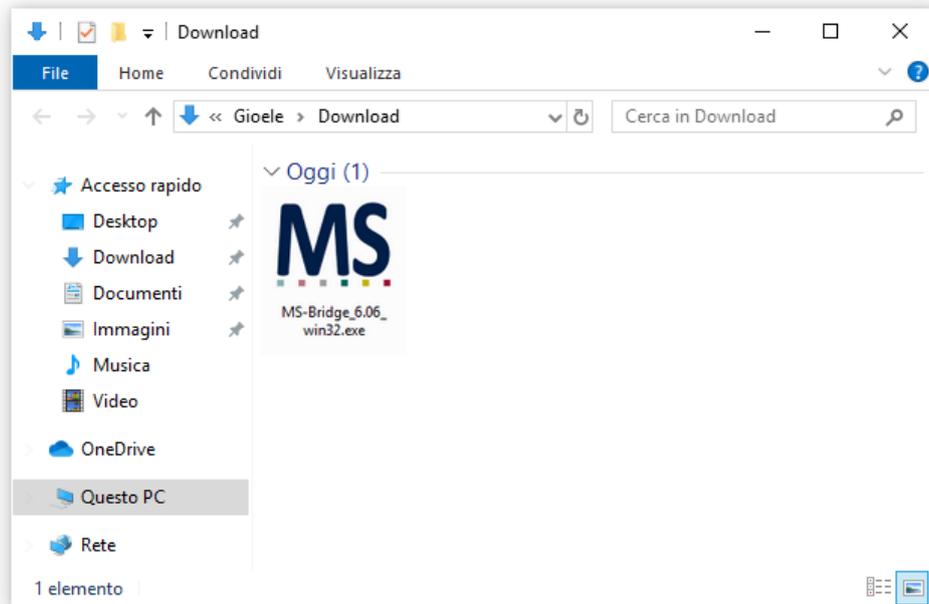
The screenshot shows the MS Printing Solutions website. The header includes the MS logo (PRINTING SOLUTIONS a DOVER company) and a navigation menu with links: HOME, PRODUCTS, LARIO, MINILARIO, SOFTWARE, WHAT'S MORE, SUPPORT (highlighted in a dark blue box), CAREERS, and CONTACT. Below the header is a large dark blue banner with the word 'DOWNLOAD' in white. Underneath, there are two main sections: 'SOFTWARE' and 'FIRMWARE'. Each section contains a table of links to documents and packages for different printer models.

SOFTWARE		FIRMWARE	
<b>MS-Bridge</b>		<b>LaRio Printers</b>	
DOCUMENTS	PACKAGES	DOCUMENTS	PACKAGES
<a href="#">MS-Connect White Paper</a>	<a href="#">Windows Installer V6.06</a>	<a href="#">Note di rilascio</a>	<a href="#">Version 4.26</a>
<a href="#">MS-Bridge Installation Guide</a>	<a href="#">macOS Installer Package V6.06</a>	<a href="#">Release note</a>	<a href="#">Version 4.22</a>
	<a href="#">Linux tar Archive V6.06</a>	<a href="#">Change Log Coating Unit IT</a>	<a href="#">Coating Unit Ver. 3.11</a>
<b>MatchPrint II</b>		<b>JP Series Printers</b>	
DOCUMENTS	PACKAGES	DOCUMENTS	PACKAGES
<a href="#">User Manual</a>	<a href="#">Version 7.26</a>	<a href="#">Note di rilascio</a>	<a href="#">Version 6.62</a>
<a href="#">Manuale utente</a>	<a href="#">Version 7.24</a>	<a href="#">Release Notes</a>	<a href="#">Version 6.62 + Languages Pack</a>
<a href="#">Note di rilascio</a>			

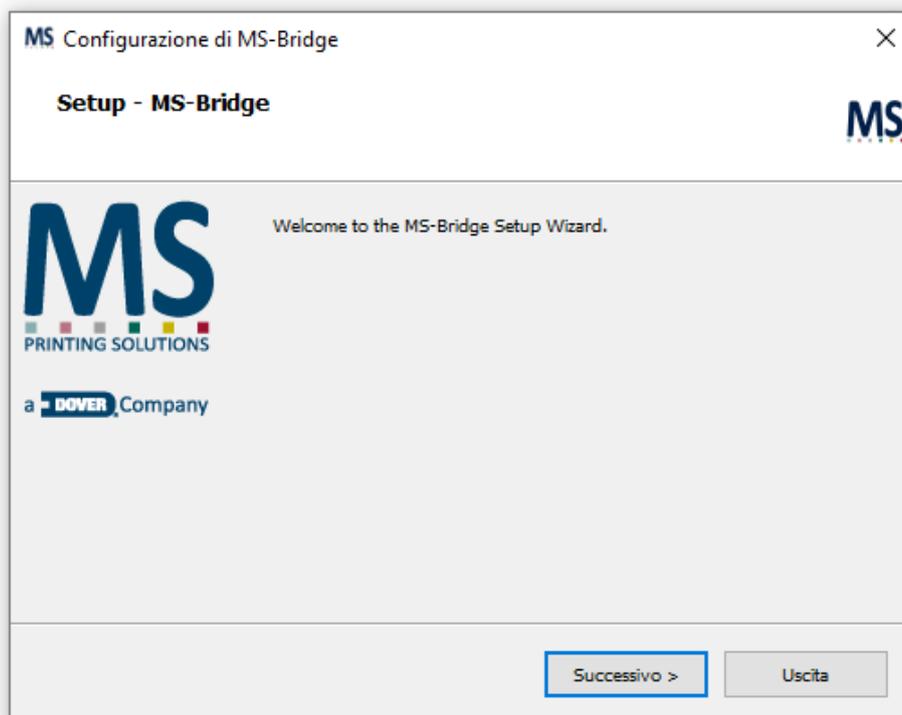
Download the correct package for the running OS on the RIP or PC station computer.

### 1.4.1 Microsoft Window installation procedure

MS-Bridge for Windows is distributed as Executable (.exe) file. Make sure to provide to the browser the rights to download the package.



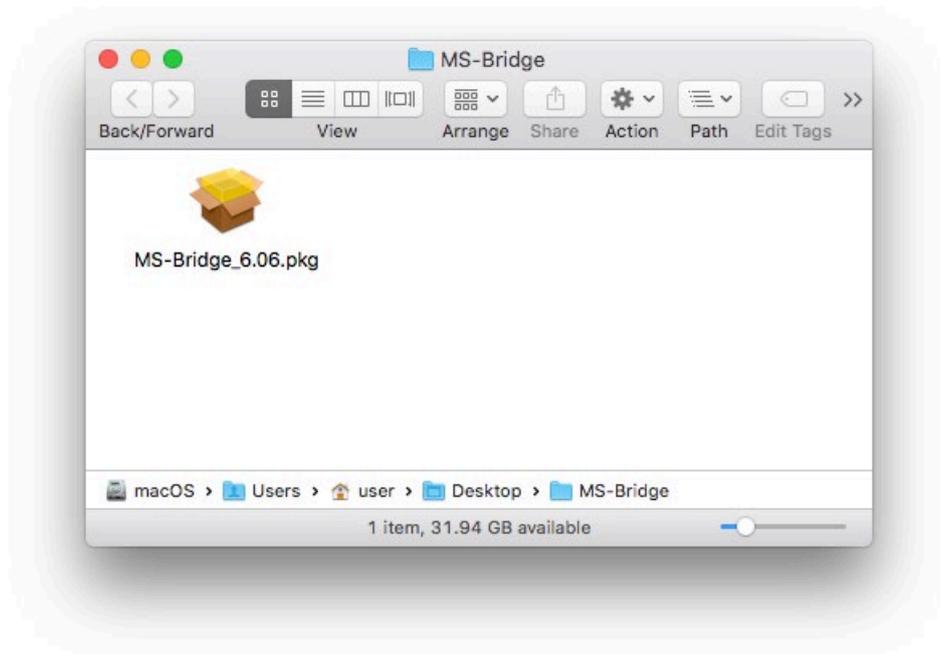
Double click on the installation package



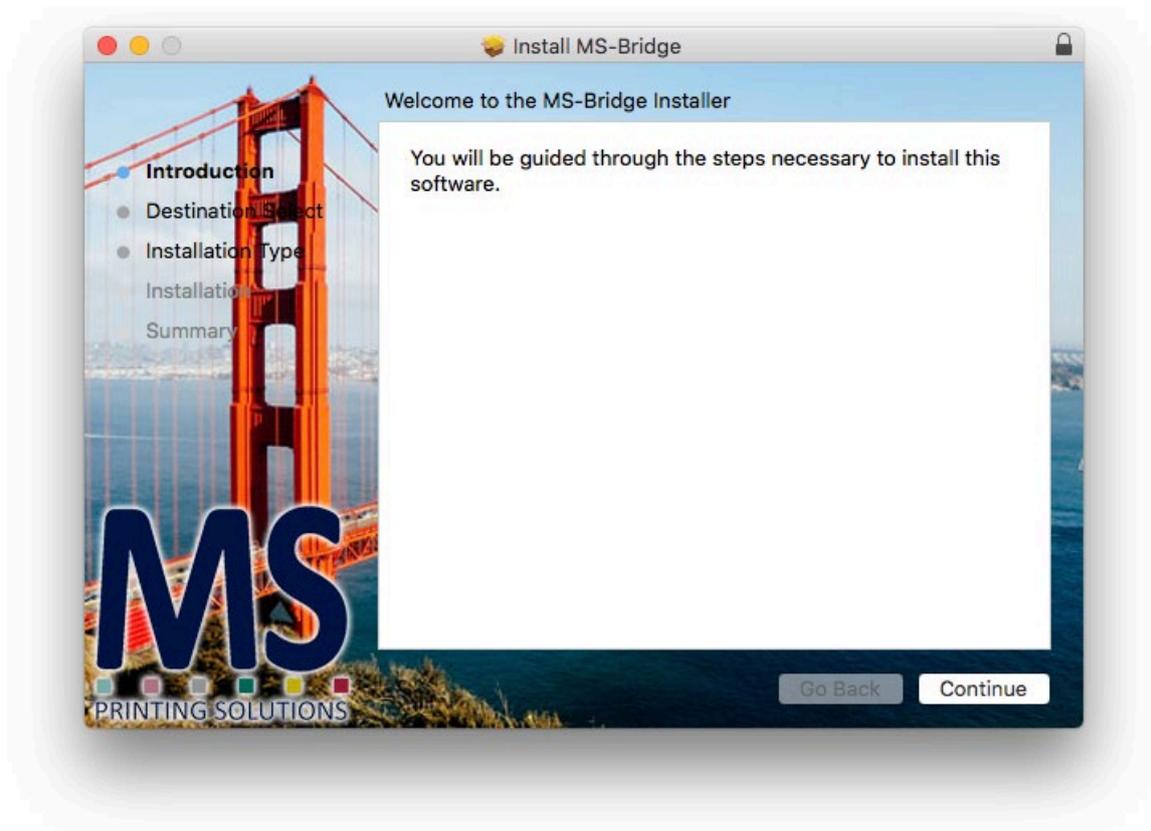
Follow the on-screen instruction and verify that the software is running checking the MS icon in the system tray. If requested by the Windows Firewall allows outgoing and incoming network connection.

### 1.4.2 Apple macOS installation procedure

MS-Bridge is distributed as Installation Package (.pkg) file.



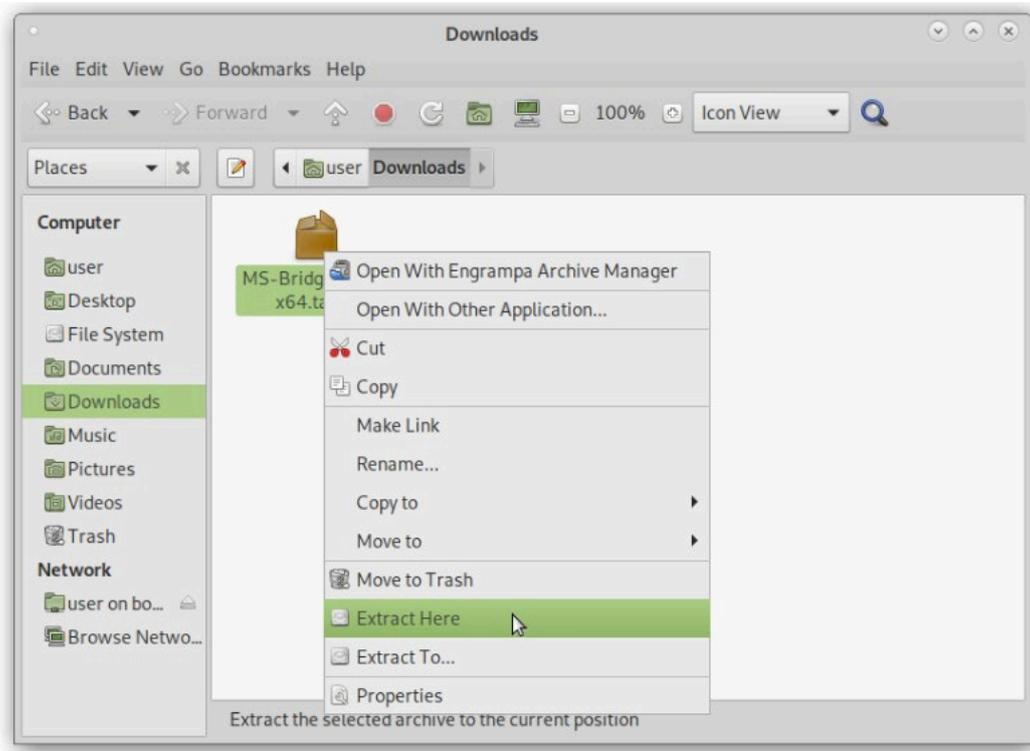
Double-click on the Installation Package.



Follow the on-screen instruction and verify that the software is running checking the MS icon in the menubar.

### 1.4.3 Linux distribution installation procedure

MS-Bridge is distributed as compressed archive format (.tar.gz)



Right click on the compressed file (.gz) and select “Extract here” from the contextual menu to obtain the installation archive (.tar) and then double click on the extracted file.



Follow the on-screen instruction and verify that the software is running checking the MS icon in the system notification area.

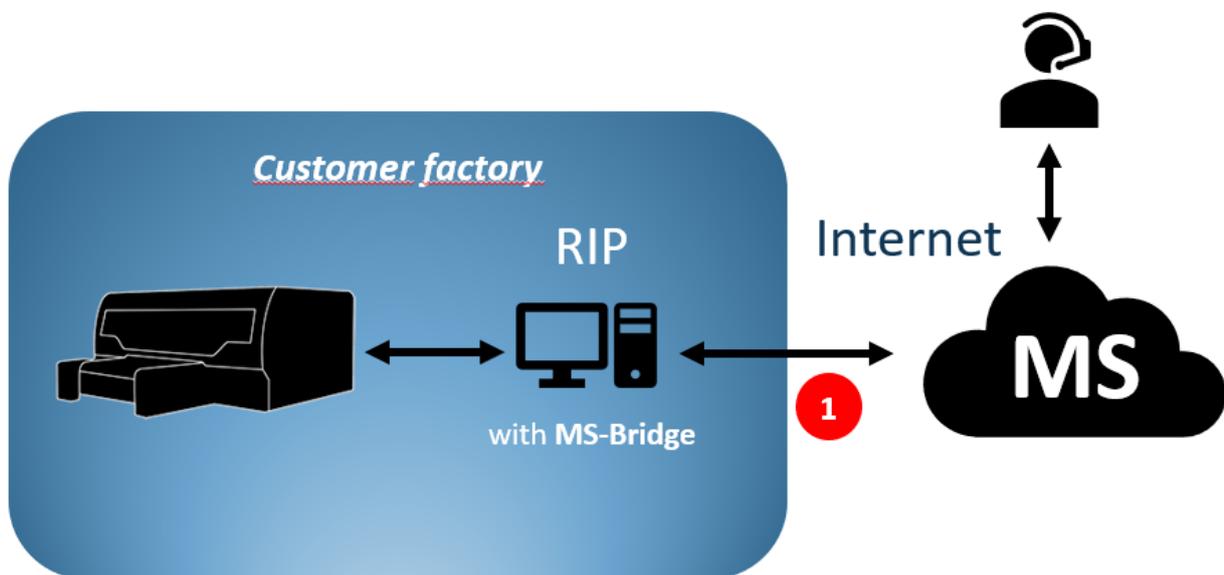
## 1.5 Architecture

The Remote support system can be implemented in different scenarios, depending by the customer network configuration.

After the starting of the software, it **automatically** tries to connect to the printer or another MS-Bridge instance (as gateway) or the MS remote support server.

### 1.5.1 SCENARIO 1 – Point to point connection

The RIP computer that drives the printer is directly connected to internet.

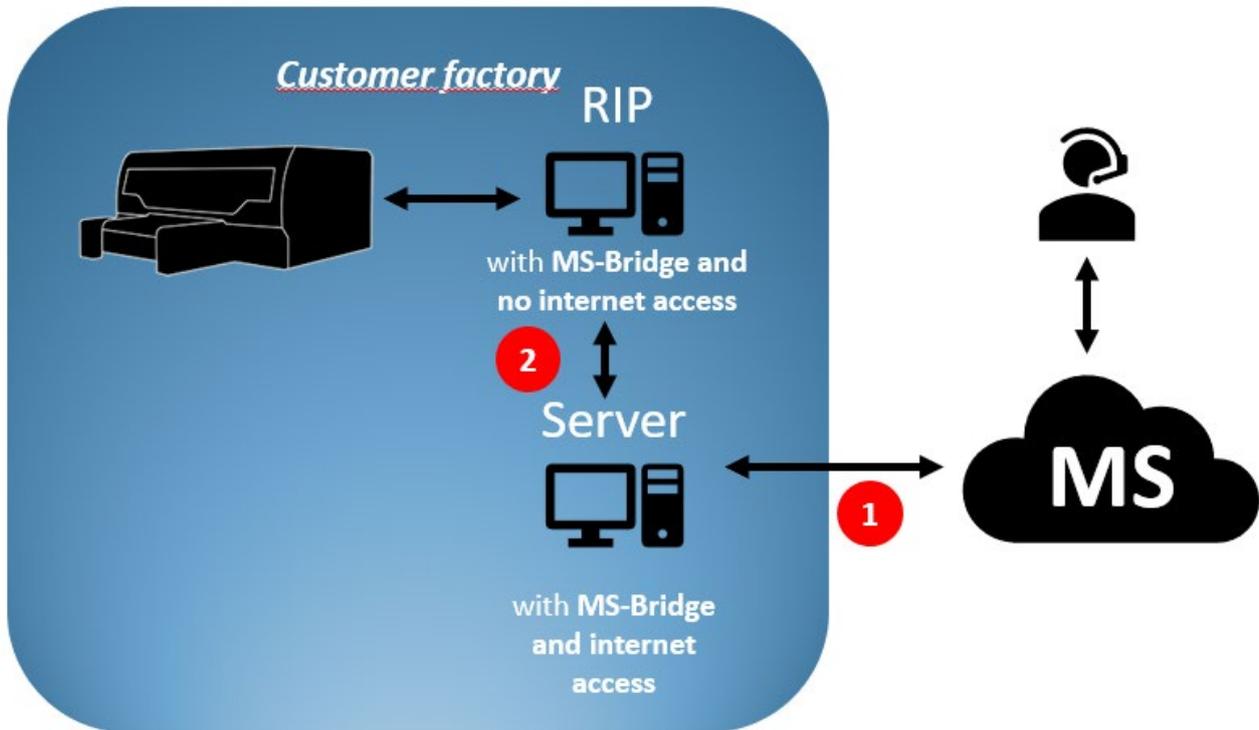


1. Download MS-Bridge installation package
2. Install it on the RIP computer
3. Wait for the software to establish the connect with the printer and with MS remote support server

**1** Outbound connection on 52666 port

### 1.5.2 SCENARIO 2 – Isolated printer environment

The RIP computers don't have internet access, but it is connected to the company network where is a server with internet access. The connection with the MS remote support system will be implemented using two instances of MS-Bridge.



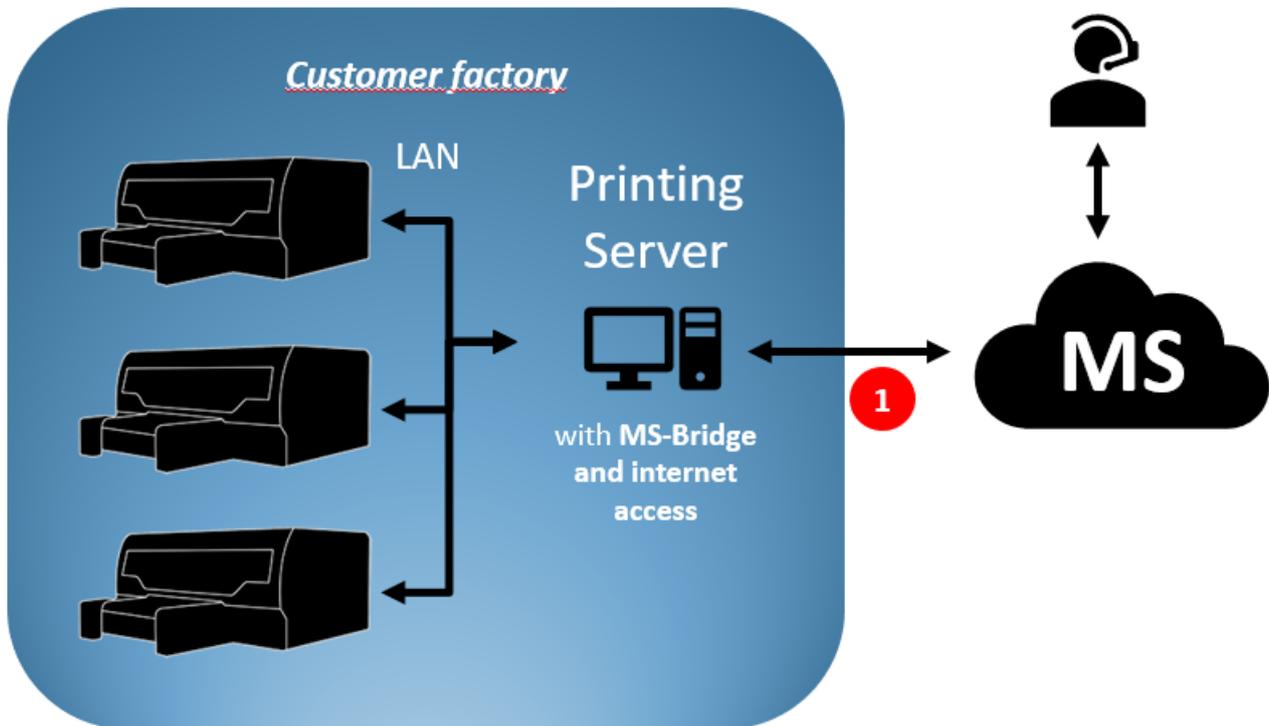
1. Download MS-Bridge installation package
2. Install it on the RIP computer and wait for the software to establish the connect with the printer.
3. Install on the server with internet access and wait for the software to establish the connect with the bridge on the RIP computer and the MS remote support server.

**1** Outbound connection on 52666 port

**2** LAN internal connection on 52666 port to act as a gateway

### 1.5.3 SCENARIO 3 – Shared RIP

The printers are connected to the company network (LAN). They are driven by one central printing server that has internet access.



1. Download MS-Bridge installation package
2. Install it on the Printing server
3. Wait for the software to establish the connect with the printer and with MS remote support server

**1** *Outbound connection on 52666 port*

## 1.6 Data treatment policy

While the printer stores a several information about the daily operation MS does neither collect nor store automatically any data from it. Even more important the overall print jobs are not stored in the machine so there is no actual way to see what the machine is printing so, connecting the machine to the MS-Cloud using the MS-Bridge must be considered safe.

Due to the limited storage available in the printer the older diagnostics logs are deleted automatically and, usually, it is not possible to retrieve more than one month of logs from the machine.

During such support activity, MS may have access to:

- Printers, printer logs, printer configurations, and other information specific to customer usage;
- Usernames, login names (including first and last names), and passwords that can be saved on the printer. Note that such information may be used to access customer printers and remotely modify the configuration of the printer and to otherwise troubleshoot; and
- Information related to the foregoing.

In order for MS to provide such support, you represent and warrant that you shall ensure that all required notices are provided to employees or other individuals as may be required under applicable law for monitoring and other data collection pursuant to the services noted above.

## 1.7 IT department requirements

To enable the Remote Support system, the following steps are to be followed:

1. The MS-Bridge software tries to reach our server named "**bridge.msprintingsolution.it**" and connect to the port **52666** of that server. It is, of course, mandatory in order let the remote support working fine that the company network rules allow a TCP/IP outgoing connection to the above server via a gateway (proxies are not supported)
2. To let the machine be visible by the MS technical support the MS-Bridge must be installed on any RIP PC connected point-to-point to a printer.
3. If the RIP PC cannot connect to the Internet or the company rules does not allow such connection, it is possible anyway to install one additional copy of the MS-Bridge on a computer that is able to contact "**bridge.msprintingsolution.it**" and able to connect to the printers too. With this communication topology the MS-Bridge will broadcast the network to discover other instances of MS-Bridge and acting as a second level bridge without any specific configuration. This additional single instance MS-Bridge can manage and connect several printers. This configuration helps to keep the production environment isolated from the rest of the company network while providing anyway the access for the Remote Support.

# 2 MS-Bridge user guide

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## 2.1 Start-up

After the installation of the package, the MS-Bridge software will start automatically at every system start up.

According to the user account control (UAC under Windows or user privileges under Linux) it is necessary to provide to the software the correct rights to be able to start automatically every system boot.

It is possible to uninstall the software from the standard OS application management interface.

## 2.2 Keys features

The main features of the MS-Bridge are:

1. Creation of the connection tunnel between an MS printer and the MS remote support server
2. Synchronization of the printer time
3. Local automatic backup of the printer parameters
4. Direct link to the printer integrated website

## 2.3 Notification area icon

The Ms-Bridge software show an icon in the notification area. It contains information regarding the status of the connections and the access to the program menu.

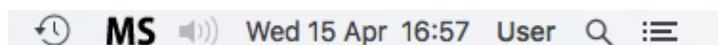
The two letters of the MS icon can assume two different appearance (depending on the OS settings) and both provides a quick visual feedback of the connection status:

- The 'M' switched on mean that MS-Bridge is currently connected to the (M)achine
- The 'S' switched on mean that MS-Bridge is currently connected to the MS (S)erver

Microsoft Windows System Tray



Apple macOS Menubar Icons



Debian Linux Menubar Icons



## 2.4 Standard menu

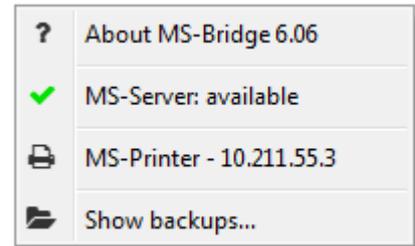
An option menu is available clicking on the MS icon; the appearance may be slightly different depending on the Operating Systems and user's preferences.

The first line shows the currently installed version and give the access to the "About.." dialog with some additional information.

The second line indicates the status of the connection between local MS-Bridge and the MS remote server.

The lines that follow contain the list of the discovered printers. To be available a printer must be switched on and connected through the LAN network to the MS-Bridge. Here is possible to see the name and the current IP assigned to any printer. Clicking over it the software will open the default OS browser to navigate the printer as a website.

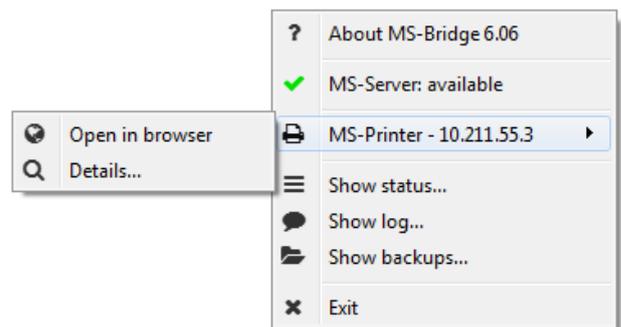
The "Show backups" entry opens the folder where MS-Bridge store the parameters backup.



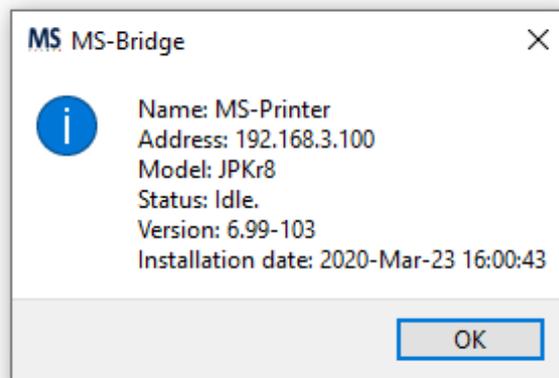
## 2.5 Expert menu

The expert menu allows to access to some additional commands and features; it can be opened with CTRL+click on the icon (Option+Click on macOS).

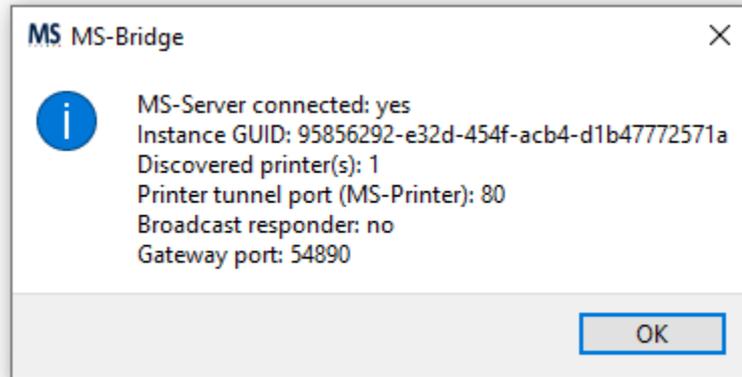
Appearance can vary slightly between different operating systems.



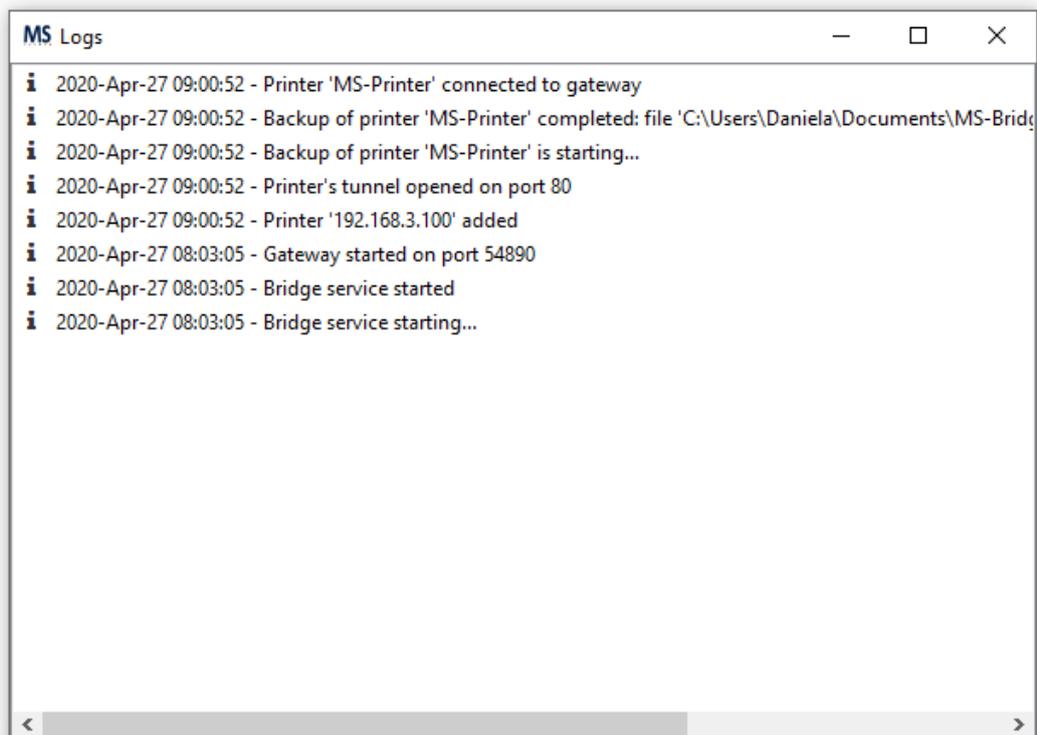
- In the expert menu the "Printer List Items" have an additional submenu where it is possible to obtain detailed information about the connected printer.



- The “Show status” menu item gives more information regarding the active connections on both sides (server and printer). It is also possible to check if this instance of MS-Bridge is running as gateway and how many printers is managing.



- “Show log” open a diagnostic register window.



- “Exit” command close the application.