



GRUPPO TELECOM ITALIA TIM

Smart Enterprise

Bitdefender Antivirus on:

d-COLOR MF259

d-COLOR MF309

d-COLOR MF369

d-COLOR MF3303

d-COLOR MF3302

d-COLOR MF4003



- Virus scan engine embedded in MFP FW;
- Enabled by i-Option LK-116 (random code B3835);
- Prevent Distribution of Virus/Malware via MFP.

Virus scan - roles

Detect virus in the office

after reception

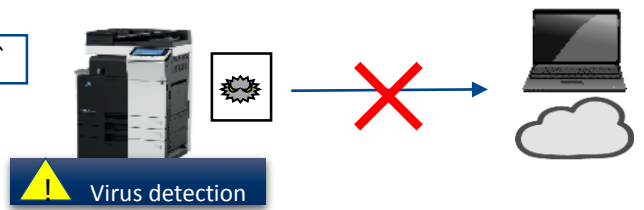
Notify when MFP received virus influenced files



Prevent diffusion of virus/malware file to outside

before transmission

Check output files before sending to outside



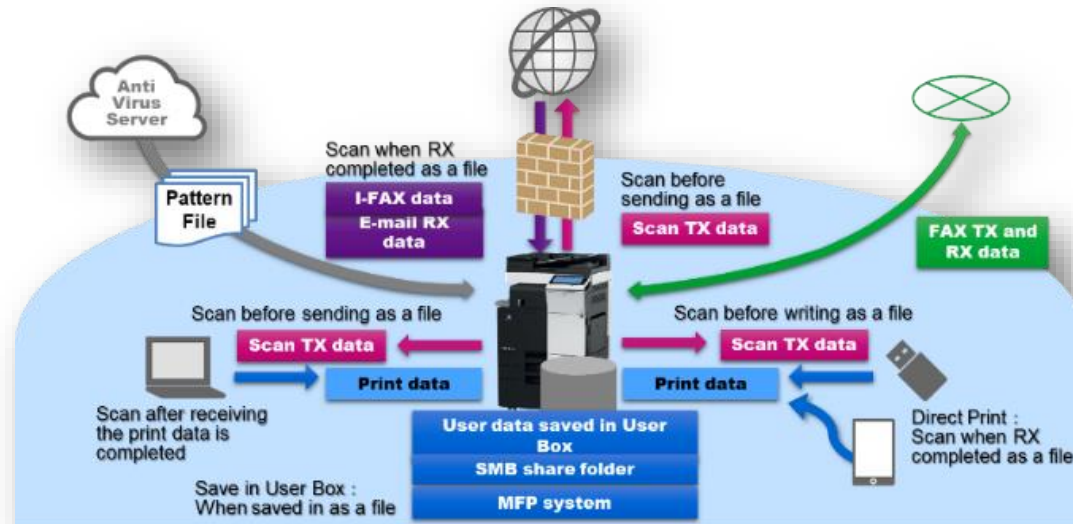
Detect hidden risk in MFP

In MFP

Periodically check saved files in MFP to detect virus/malware files



Bitdefender - Virus SCAN ENGINE in MFP



1

Real time

Virus Scanning jobs
Print data, Scan-TX data, i-
FAX TX/RX data

2

Manual scan

Virus Scanning on HDD
(User box, SMB folders,
MFP system)

3

Scheduled scan

Periodic Scan on HDD
(User box, SMB folders, MFP
system)

What is scanned ?

Input

- PC printing
- Direct printing
- E-mails received
- I-faxes received
- IP address faxes received
- USB data printing
- USB data stored in Box
- Encrypted PDF Box files
- OpenAPI application
- Serverless ubiquitous prints
- Imported data (CSV/XML)



Output

- Scan To PC
- Scan To Cloud
- Scan To USB
- I-faxes sent
- IP address faxes sent

Other

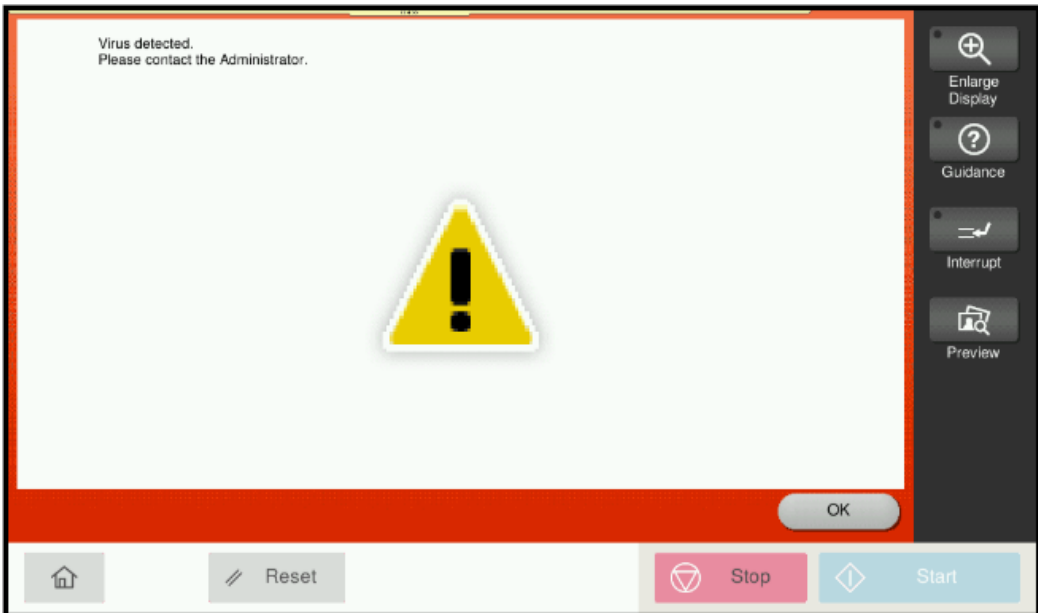
- SMB shared folder: Added files/virus scan performed upon opening
- Device certificates, S/MIME certificates: Virus scan performed upon installation
- Fonts: virus scan performed upon installation

Virus scan engine in MFP

- ✓ Implemented customized virus scan engine into MFP;
- ✓ Updating Virus scan engine is done by updating FW, if necessary;
- ✓ Virus pattern file is updated by accessing Cybertrust server (cloud)
 - Check every 4 hours whether new pattern file is available
 - FW is downloading the pattern file as background job

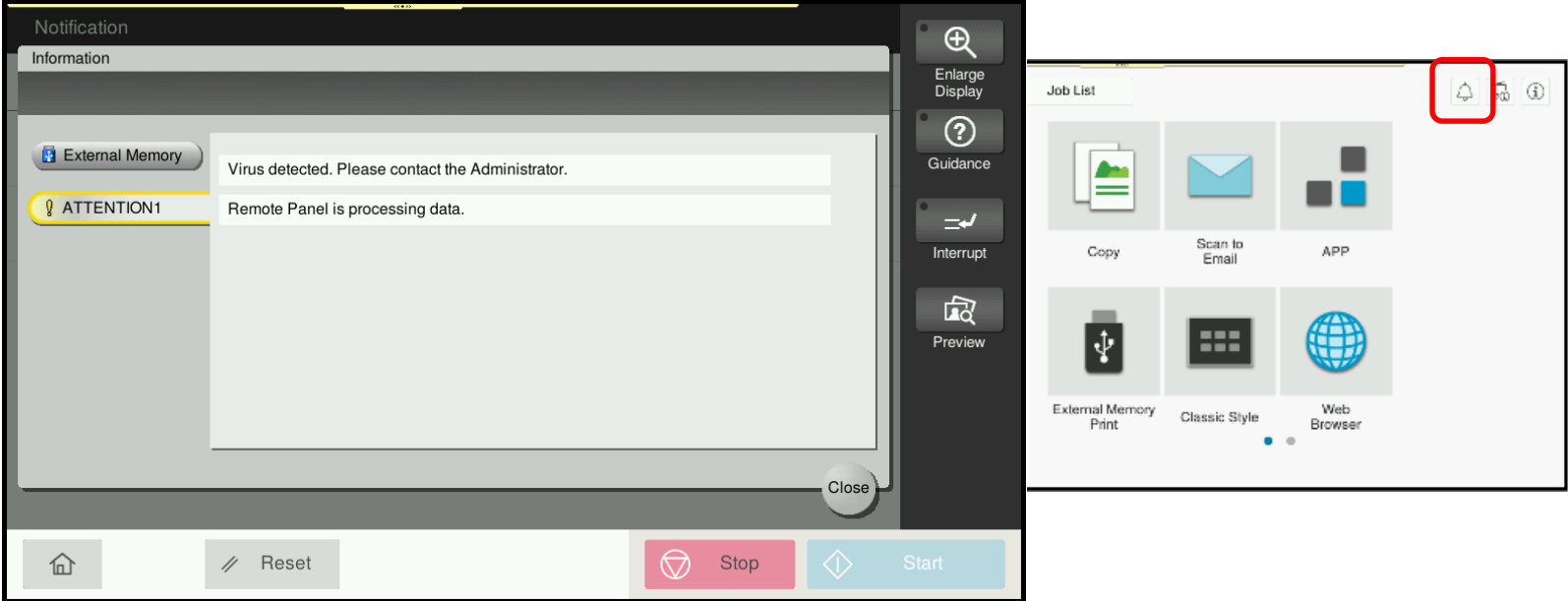
Caution screen

Shows when detecting a virus

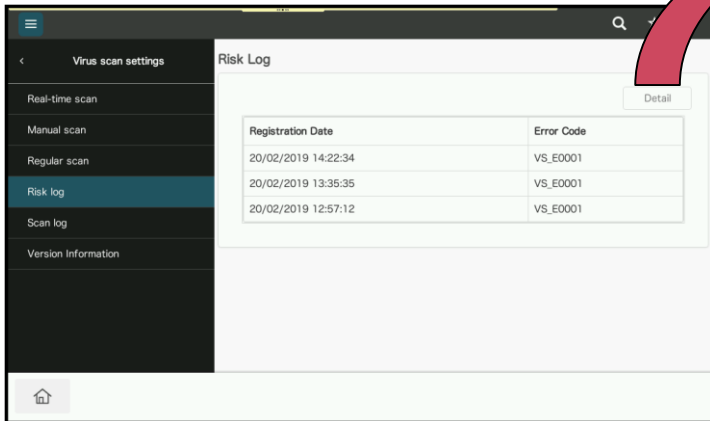


Attention Message

Remains displayed until Admin confirm the “Risk Log”



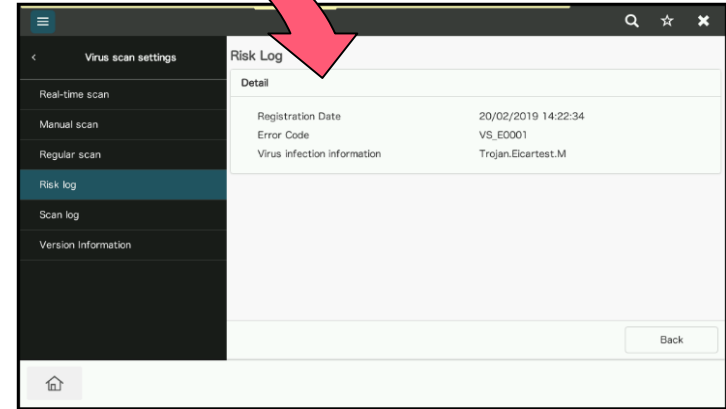
Virus Scan Settings



Screenshot of the Virus Scan Settings application showing the Risk Log screen. The left sidebar lists navigation options: Real-time scan, Manual scan, Regular scan, Risk log (selected), Scan log, and Version Information. The main content area displays a table with columns for Registration Date and Error Code.

Registration Date	Error Code
20/02/2019 14:22:34	VS_E0001
20/02/2019 13:35:35	VS_E0001
20/02/2019 12:57:12	VS_E0001

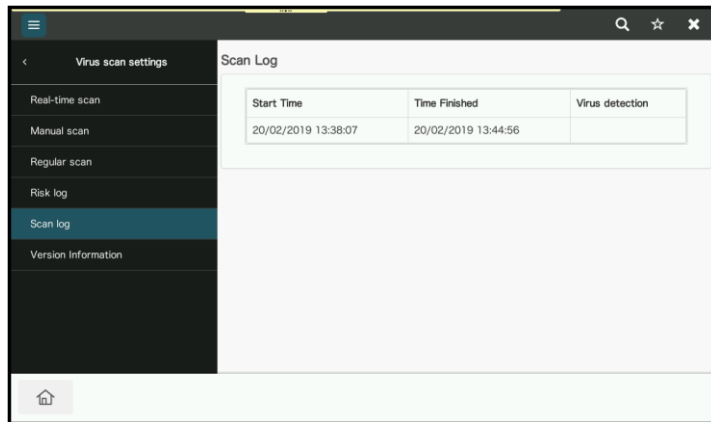
A red arrow points from the 'Detail' button in the top right corner of this screen to the 'Detail' section in the next screenshot.



Screenshot of the Virus Scan Settings application showing the Risk Log Detail screen. The left sidebar is the same as the previous screenshot. The main content area displays a 'Detail' section with the following information:

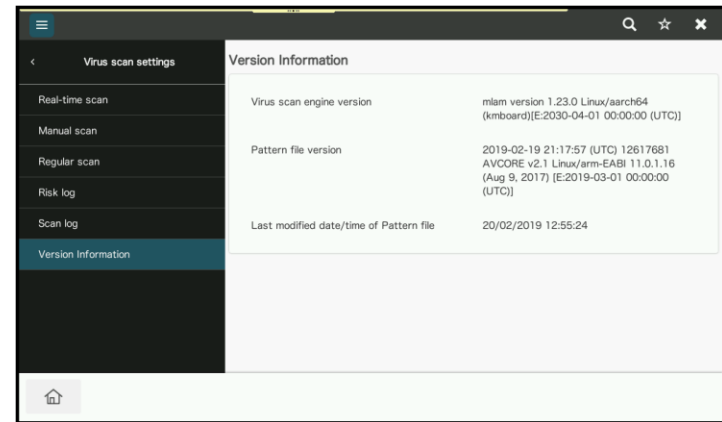
Registration Date	20/02/2019 14:22:34
Error Code	VS_E0001
Virus infection information	Trojan.Elcertest.M

A 'Back' button is located at the bottom right of the screen.



Screenshot of the Virus Scan Settings application showing the Scan Log screen. The left sidebar lists navigation options: Real-time scan, Manual scan, Regular scan, Risk log, Scan log (selected), and Version Information. The main content area displays a table with columns for Start Time, Time Finished, and Virus detection.

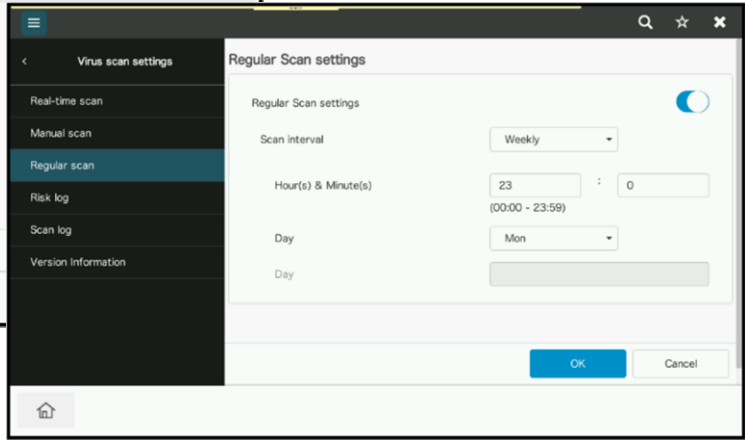
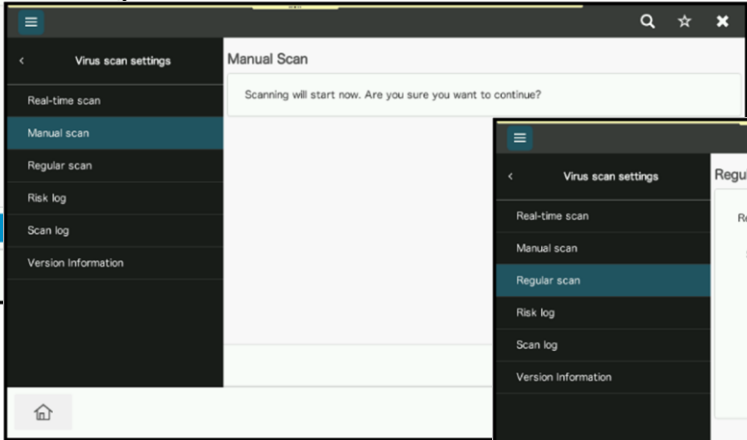
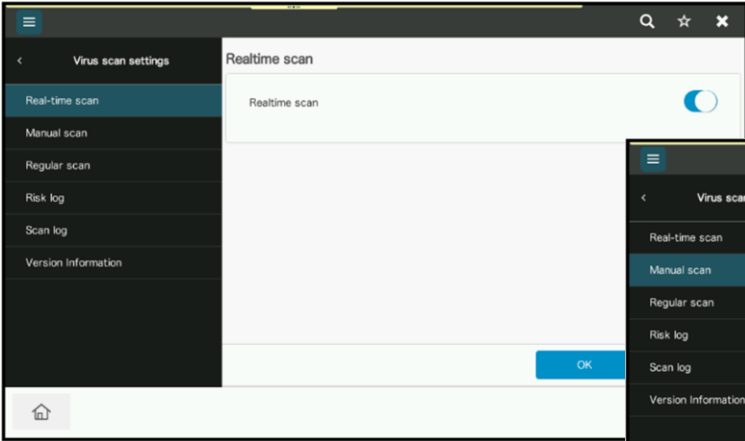
Start Time	Time Finished	Virus detection
20/02/2019 13:38:07	20/02/2019 13:44:56	



Screenshot of the Virus Scan Settings application showing the Version Information screen. The left sidebar lists navigation options: Real-time scan, Manual scan, Regular scan, Risk log, Scan log, and Version Information (selected). The main content area displays the following information:

Virus scan engine version	mlam version 1.23.0 Linux/aarch64 (kmboard)[E:2030-04-01 00:00:00 (UTC)]
Pattern file version	2019-02-19 21:17:57 (UTC) 12617681 AVCORE v2.1 Linux/arm-EABI 11.0.1.16 (Aug 9, 2017) [E:2019-03-01 00:00:00 (UTC)]
Last modified date/time of Pattern file	20/02/2019 12:55:24

Virus Scan Settings



Virus detected !!

