

Scheduled rate-limit preview window: between 15:00 and 19:00 UTC on 7 October, the new limits will be briefly active so you can see how your workloads are affected. They are live only during this window, and apply permanently from 19 October. [Learn more](#).

MARExpress technical user guide

Applies to MARExpress v1.0.3

Purpose

MARExpress provisions a supported Windows 11 computer with the selected digital product key (DPK), generates an OA3 report, and sends the report to the MDOS/SFTP service. Use this guide for preparation, first-run configuration, provisioning, verification, and troubleshooting.

What the technician needs

- A MARExpress v1.0.3 deployment ZIP created by the release owner.
- A network connection to the MDOS Smart Client/SFTP server.
- The MDOS Business ID and the IPv4 address of the MDOS Smart Client. The SFTP service uses the same IP address.
- A computer that meets the Windows 11 hardware requirements boot into Auto Mode.

The package handles its temporary SFTP authentication material during report upload. Technicians do not need to provide, copy, or retain an SFTP key.

Prepare the deployment media

1. Extract the release ZIP to a local folder or approved removable media.
2. Confirm that the extracted root contains only `Install_DPK.bat` and the `MAR` folder.
3. Do not rename or move files within `MAR`; scripts use relative paths to locate the OA3 components.
4. Run `Install_DPK.bat` while the target device is in Audit Mode.

First-run configuration

On the first launch, MARExpress asks for two values:

Prompt	Enter
MDOS Business ID	The assigned Business ID of the MDOS Smart Client.
MDOS Smart Client / SFTP server IPv4 address	The IPv4 address of the MDOS Smart Client and SFTP server.

The script validates the address and applies both values to the Home, Pro, and Citizenship OA3 configurations. It saves the deployment settings in `MAR\\Configuration\\deployment-settings.json` for later runs on that deployment copy.

To intentionally replace the stored values, open an elevated Command Prompt in the extracted package folder and run:

```
Install_DPK.bat /configure
```

Do not edit the OA3 configuration files manually during normal technician operation. The configuration command creates `.bak` files before updating the active files.

Provision a computer

1. Run `Install_DPK.bat`.
2. If prompted, enter the Business ID and MDOS/SFTP server IPv4 address.
3. Review the prerequisite results. MARExpress stops before provisioning when a requirement fails.
4. Follow the menu for the detected Windows edition:
 - Windows 11 Home launches the Home provisioning flow.
 - Windows 11 Pro presents the Professional and Citizenship options.
 - Select the edition authorized for the computer.
5. Allow OA3Tool to complete. Do not close the command windows while report processing or upload is underway.
6. Confirm the displayed DPK result. `DPK.txt` is retained as the technician-visible confirmation that the key was applied.
7. Confirm that the report upload succeeds. Keep the machine connected until it completes.

Preconditions checked by MARExpress

MARExpress checks the following before it offers provisioning:

Requirement	v1.0.3 requirement	What to do if it fails
Windows edition	Windows 11	Use a supported Windows 11 installation.
Windows build	At least 26200	Run Windows Update and restart as required.
OA3Tool	Build at least 26100 for all three included editions	Replace the deployment package with a current release.
TPM	Enabled and compatible with TPM 2.0	Enable TPM 2.0 in firmware or use supported hardware.
Secure Boot	Enabled	Enable Secure Boot in UEFI firmware.
Windows 11 hardware	Storage, memory, processor, and firmware checks	Review the compatibility log and remediate the named item.

The Windows and OA3Tool minimum builds are release-controlled. Technicians should not change them; the release owner updates and validates the values before publishing a new package.

Confirm a successful upload

A successful run reports that the SFTP upload succeeded. If confirmation is required, verify that the expected `report.xml` file is present on the MDOS/SFTP service.

Each edition writes working data under its own folder:

- `MAR\\Home11\\Output` and `MAR\\Home11\\Log`
- `MAR\\Pro11\\Output` and `MAR\\Pro11\\Log`
- `MAR\\Cit11\\Output` and `MAR\\Cit11\\Log`

The report remains in the edition's `Output` directory if uploading fails, allowing a support technician to investigate or retry without regenerating the report.

Logs and troubleshooting

Symptom	Where to look	Usual action
Windows 11 compatibility says <code>Undetermined</code> or <code>n/a</code>	<code>MAR\\Log\\Windows11Compatibility\\Windows11Compatibility-*.log</code>	Review the return reason and the detailed processor/TPM snapshots. Record the log with the support case.
TPM requirement fails	Command output and compatibility log	Check firmware settings and confirm that Windows exposes TPM 2.0. <code>PhysicalPresenceVersionInfo</code> is not the TPM specification version.
Windows build or OA3Tool build fails	Command output	Update Windows or obtain the latest MARExpress release.
Report upload fails	The edition's <code>Log</code> <code><transaction>-sftp-attempt-<n>.log</code> and <code>production-log.log</code>	Check reachability of the configured server, port 2022, the reported SFTP error, and the retained report in <code>Output</code> .
SFTP key not found or invalid	SFTP attempt log	Use an unmodified, current release package. Do not manually add or alter the temporary key file.
Host-key warning or mismatch	SFTP attempt log and <code>Config\\known_hosts</code>	A first-connection notice can be expected. A changed host key requires review by the server owner; do not bypass it.
Configuration prompts every time	<code>MAR\\Configuration\\deployment-settings.json</code>	Confirm the package location is writable and the saved file is not being deleted between runs.

For an SFTP issue, collect the affected edition's `production-log.log`, the numbered SFTP attempt logs, the report filename, the

transaction ID, and the server address. Do not share private-key content.

Escalate before proceeding when

- The machine is not Windows 11-compatible.
- The TPM is not TPM 2.0, disabled, or cannot be queried reliably.
- Secure Boot cannot be enabled without an approved firmware change.
- The configured MDOS/SFTP address is unknown or is not reachable.
- The SFTP host key unexpectedly changes.
- An upload has exhausted all three attempts.

Preserve the report and logs; do not repeatedly rerun provisioning to work around an unresolved upload or compatibility failure.

