

Meridian

Installation and Administration Guide

Document ID	IM.MERIDIAN.INT.02
Document version	1.0
Date of issue	2026-10-06
Applies to	Meridian 1.1.10.0
Language	English
Publisher	iMobile

Contents

1. General information	3
2. Environment requirements	3
3. Installation	3
3.1. What to download	3
3.2. PostgreSQL server	4
3.3. Database	4
3.4. Program on a workstation	5
3.5. Installed files	5
4. Initial configuration	6
4.1. First sign-in	6
4.2. Employees and rights	6
4.3. Licence	6
4.4. Main settings	6
4.5. Cashier window	7
4.6. Mailboxes	7
4.7. HTTP API service	7
4.8. Demo data	7
5. Verifying the installation	8
6. Updating	8
6.1. Program	8
6.2. Database	8
7. Backup and restore	8
8. Removal	9
9. Troubleshooting	9
9.1. Logs	9
9.2. Typical failures	9

About this document

This guide describes how to install, configure, update, back up and remove Meridian version 1.1.10.0, and what to do when something goes wrong.

It is written for the customer's administrator, who is expected to know Windows administration and the basics of PostgreSQL administration.

1. General information

Meridian has two parts that are installed separately:

- a database on the customer's PostgreSQL server, deployed with the scripts from the database kit `Meridian-db-kit.zip`;
- the program `Meridian.exe`, installed on every workstation from the package `Meridian-setup.msi`.

The database is deployed before the program is installed: the installer asks for the database address and can test the connection at once. PostgreSQL itself is not part of the delivery; the customer installs and maintains it.

The program connects to the database under a PostgreSQL service role named `imobile`. The name and the password of this role are built into the program and are the same for all installations; only the server address, the port and the database name are configurable. Users of the program are employee records in the database, not PostgreSQL roles.

2. Environment requirements

Item	Requirement
Workstation	Windows 10 or Windows 11 (x64), Windows Server 2016 or later
Rights	Windows administrator rights to install the package
Disk space	About 150 MB for the program files
Database server	PostgreSQL 12 or later, 16 recommended
Network	Access from the workstations to the PostgreSQL port (TCP 5432 by default)
Internet	Outbound HTTPS access to <code>accounts.new-imobile.com</code> (licence) and <code>new-imobile.com</code> (updates)
Database deployment	A computer with PowerShell 7 (<code>pwsh</code>) and <code>psql.exe</code> from a PostgreSQL distribution
Screen	A program window at least about 1130 pixels high

PostgreSQL versions below 12 cannot be used: the database structure relies on generated columns. No separate processor or memory requirements are set for a workstation.

3. Installation

3.1. What to download

Two files are downloaded from the vendor's site:

- [Meridian-setup.msi](#) — the installation package, about 158 MB;
- [Meridian-db-kit.zip](#) — the database kit.

The SHA-256 checksum of the package is published in

<https://new-imobile.com/download/meridian/latest.json>. A downloaded file can be checked with:

```
Get-FileHash .\Meridian-setup.msi -Algorithm SHA256
```

The package is not code-signed; Windows may warn about an unknown publisher.

3.2. PostgreSQL server

1. Install PostgreSQL 12 or later with its standard installer and note the password of the `postgres` user.
2. If workstations connect over the network, open the PostgreSQL port in the server firewall and allow the connections in `pg_hba.conf`, then restart the PostgreSQL service.
3. From a workstation, check that the server can be reached:

```
Test-NetConnection <server> -Port 5432
```

Because the password of the service role is the same for all installations, `pg_hba.conf` should allow connections only for the Meridian database, the role `imobile` and the workstation subnet, for example:

```
host    crm_main  immobile  <workstation subnet>  scram-sha-256
```

While the database is being deployed, the `postgres` user also needs access from the computer that runs the script.

The connection between the program and PostgreSQL is not encrypted. The workstations and the server must be in a trusted network or be connected through a protected channel such as a VPN.

3.3. Database

Unpack `Meridian-db-kit.zip`. On a computer with PowerShell 7 and access to the server run:

```
pwsh -File db\install\deploy-db.ps1 -DbHost <server> -Port 5432 `
-SuperUser postgres -SuperPassword <postgres password> `
-Database crm_main -AdminPassword <program administrator password>
```

The script creates the role `imobile`, the database, the structure (`010_schema.sql`), the base content (`020_content.sql`) and the first program user with the login `admin`. At the end it prints the number of tables, reference values and users. The script messages are in Russian.

- Always give `-AdminPassword`: without it a default password is set that is the same for all installations.
- The script runs SQL with `psql.exe`, which it looks for in `PATH` and in `C:\Program Files\PostgreSQL\<version>\bin`; another location is given with `-Psql`.
- The switch `-WithDemo` adds demo data.
- Running the script again creates no duplicates. Do not run it over a database of an earlier version: that is what `upgrade-db.ps1` is for.

The structure files in the kit do not contain the changes of the latest migrations. Therefore apply the missing migrations right after the deployment:

```
pwsh -File db\install\upgrade-db.ps1 -DbHost <server> -Port 5432 -Database crm_main -DryRun
pwsh -File db\install\upgrade-db.ps1 -DbHost <server> -Port 5432 -Database crm_main
```

The first command only shows what would be applied; the second performs the upgrade. Without this step some functions do not work, for example receiving mail over IMAP.

3.4. Program on a workstation

Run `Meridian-setup.msi` with administrator rights. The installer pages are in Russian; their order is:

1. Welcome.
2. Installation folder, `C:\Program Files\Imobile\Meridian` by default.
3. The page «База данных» (Database): the server (`127.0.0.1` by default), the port (`5432`) and the database name (`crm_main`).
4. Confirmation and installation.

The button «Проверить подключение» (Test connection) contacts the server under the same service role the program uses. The answer is shown in Russian and has one of three meanings:

Answer	Meaning	What to do
Connected, with the number of employees	The server is reachable and the database is deployed	Continue the installation
Could not connect, with an error text	The server is unreachable, the port is closed or the role <code>imobile</code> does not exist	Check the address, the firewall, <code>pg_hba.conf</code> and the database deployment
The server answers but this is not a Meridian database	The named database has no Meridian tables	Name another database or deploy it

With an unreachable address the window does not respond for about 20 seconds, until the connection attempt times out.

Installation without windows:

```
msiexec /i Meridian-setup.msi /qn DB_HOST=<server> DB_PORT=5432 DB_NAME=crm_main
```

Installation with a log:

```
msiexec /i Meridian-setup.msi /l*v %TEMP%\meridian-install.log
```

3.5. Installed files

Path	Contents
<code>Meridian.exe</code>	The program
<code>DBConnect.db</code>	Encrypted connection file, created during installation
<code>form_catalog.tsv</code> , <code>form_ancestors.tsv</code>	Screen catalogue used when setting up roles
<code>Lang\</code>	Resources of the Russian interface
<code>Fonts\</code>	Interface fonts; not installed into the system
<code>libeay32.dll</code> , <code>ssleay32.dll</code>	OpenSSL libraries for receiving mail over IMAP
<code>tools\MeridianDbTool.exe</code>	Tool that tests the connection and writes <code>DBConnect.db</code>
<code>python\</code> , <code>py\</code>	Python 3.12 runtime and the packages of a regional module

A shortcut is created in the Start menu, folder Meridian. In “Apps and features” the product appears under a Russian name beginning with “Meridian”. The installation parameters are written to the registry key `HKLM\Software\Imobile\Meridian (DbHost, DbPort, DbName, InstallDir)`.

4. Initial configuration

4.1. First sign-in

1. Start the program from the Start menu. The Authentication window must open.
2. Sign in as `admin` with the password given when the database was deployed.
3. Check that the sections Warehouse → Warehouses and Job → Clients open.

The interface language follows the Windows language and is switched from the system menu of the program window (`Alt+Space`, the Language item).

4.2. Employees and rights

Employees are created in Settings → Administration, page Employees. The administrator sets the login and the password. An employee who does not need to sign in is created without a login and takes no licence seat.

Rights are set in two ways that work together:

- the section profile on the employee card: which sections are visible and which actions are allowed in them;
- roles in Settings → Access and roles: for each screen a colour marks the access to buttons, fields and columns — red (hidden), yellow (read), green (edit).

To give an employee a ready-made set of rights, press “Standard roles...” on the Roles page, choose the employee and one of the 13 roles and confirm the warning. The employee's previous personal roles are removed. Changed rights apply from the employee's next sign-in.

4.3. Licence

For the first 14 days after the first start the program works without activation. To activate:

1. Register the company's account at `accounts.new-imobile.com/account` and connect a plan; the key for the 10-seat plan is issued there free of charge.
2. In the program open Settings → About and press Activate.
3. Enter a work e-mail address and press “Get code”. The code arrives by e-mail and is valid for 30 minutes.
4. Enter the code and the licence key of the form `IM-MERI-....`

Activation is done once per computer and covers every Windows account on it: the licence file `%ProgramData%\Imobile\Meridian\license.dat` is bound to the computer. A stored licence works without the server for 14 days from its issue; after that the program needs access to `accounts.new-imobile.com`. If a licence term has ended, the program opens the database in view-only mode.

4.4. Main settings

Settings are stored in the database and changed in Settings → Administration, page “Dynamic settings”. Setting names and descriptions are stored in Russian; use the codes below.

Setting	Default	Purpose
<code>UPDATE_CHECK</code>	on	Check for a newer version at sign-in
<code>UPDATE_CHECK_DAYS</code>	1	Shortest interval between checks, in days

Setting	Default	Purpose
UPDATE_AUTO_DOWNLOAD	off	Download the new package without asking
UPDATE_URL	the address of <code>latest.json</code> on the vendor's site	Source of version information
CURRENCY_RATE_AUTO	on	Load exchange rates at sign-in from <code>CURRENCY_RATE_URL</code> (the Bank of Russia site by default)
REGION	AUTO	Region of use; <code>AUTO</code> follows the interface language
CASH_STOCK, CASH_PRICELIST	empty	Warehouse and price list of the cashier window
CASH_WALLET_CASH, CASH_WALLET_CARD	two preset wallets	Budget wallets for cash and card payments
PYTHON_DLL, RECEIPT_PRINTER	empty	Python library and printer for receipt printing
FILE_STORE_MODE	local	Attachment store: a folder, S3 or WebDAV

If exchange rates from the default source are not needed, turn `CURRENCY_RATE_AUTO` off. Attachments are stored by default in the folder set on the Paths page. The `s3` and `webdav` modes should be verified by uploading one file before use; the access keys of the store are kept in the settings in clear text.

4.5. Cashier window

To print receipts with the supplied script, the cashier's workstation needs Python 3 with the `pywin32` package and a printer installed in Windows. The path to `python3XX.dll` is given in `PYTHON_DLL`; if it is empty, the library is searched for in the program folder, in the registry, in the usual installation folders and in `PATH`. The script text is changed with the “Receipt code” button in the cashier window. The supplied script prints Russian captions and encodes the output in code page 866, so it has to be adapted to the customer's language and printer. Without Python a sale is posted but no receipt is printed.

The preset retail customer name and the two preset cash-desk wallets have Russian names; rename them in the settings and in the Budget section.

4.6. Mailboxes

A mailbox is created on the employee card. For receiving, enter the IMAP protocol, the server, the port, the kind of encryption, the login, the password and the folder; the “IMAP check” button tests the connection. Receiving over POP3 does not store messages in this version.

4.7. HTTP API service

The installation package neither installs nor starts the HTTP API service. Its executable is `tools\MeridianDbTool.exe`; the scripts that install the service are not part of the download set, so contact the vendor to deploy it. The service does not encrypt the connection itself: do not open its port to outside networks, and provide outside access through a reverse proxy with HTTPS.

4.8. Demo data

Demo data (a price list, goods, stock, a customer's vehicle) is added by running `deploy-db.ps1` again with `-WithDemo` and is meant for a first look only. It is removed with the script:

```
psql -h <server> -U postgres -d crm_main -v ON_ERROR_STOP=1 -f db\demo\001_demo_data_rollback.sql
```

If demo goods have already been sold or moved, delete those documents first.

5. Verifying the installation

1. The program starts and shows the sign-in window, not the connection settings window.
2. Signing in as `admin` succeeds and the sections open.
3. The About window shows version 1.1.10.0 and the licence state.
4. The connection file can be read with the tool:

```
"C:\Program Files\Imobile\Meridian\tools\MeridianDbTool.exe" --show-dbconnect --path "C:\Program Files\Imobile\Meridian\DBConnect.db"
```

6. Updating

6.1. Program

When a user signs in, the program asks the vendor's site for information about the latest version. A newer version is shown in the About window; the Update button downloads the package to `%LOCALAPPDATA%\Imobile\Meridian\update`, checks it by size and SHA-256 and starts its installation on the user's command.

The program can also be updated by hand by running the new package over the installed one: the previous version is removed automatically. The database address and name are asked for again; in an installation without windows pass them as `DB_HOST`, `DB_PORT` and `DB_NAME`.

6.2. Database

Back up the database before upgrading its structure. Then run `upgrade-db.ps1` from the database kit of the new version, first with `-DryRun` and then without it, as shown in the Installation section. The script reads the migration log `schema_migration` and applies only what is missing. Install the same program version as the database kit on the workstations.

7. Backup and restore

The program has no built-in backup. Back up:

- the database — with standard PostgreSQL tools;
- the attachment folder or store — with operating-system or storage tools.

Example of backing up the database:

```
pg_dump -h <server> -U postgres -Fc -f meridian.dump crm_main
```

Example of restoring into an empty database:

```
createdb -h <server> -U postgres -O imobile crm_main  
pg_restore -h <server> -U postgres -d crm_main meridian.dump
```

The role `imobile` with its previous password must exist on the server before the restore. Roles are moved to a new server with standard PostgreSQL tools (`pg_dumpall --roles-only`). The schedule of backups, their retention and restore tests are decided by the customer.

`DBConnect.db` does not need to be backed up: it is created again by the installer or by `MeridianDbTool.exe`. The licence file cannot be moved to another computer: the program is activated there again.

8. Removal

Remove the program through “Apps and features” in Windows or with:

```
msiexec /x Meridian-setup.msi
```

`DBConnect.db` is removed together with the program. The database is not touched. The following stay on the workstation and are removed by hand: `%ProgramData%\Imobile\Meridian`, `%APPDATA%\Imobile\Meridian`, `%LOCALAPPDATA%\Imobile\Meridian` and the registry key `HKCU\Software\Imobile\Meridian`.

9. Troubleshooting

9.1. Logs

- the program log on the workstation: `%APPDATA%\Imobile\Meridian\Log`, a separate file for each day and start; it holds errors, warnings and activation events, including failed database queries that look like an empty grid on screen. Part of the log messages are written in Russian;
- the installation log — when `msiexec` is run with `/l*v`;
- SQL errors on the server side — in the PostgreSQL log.

9.2. Typical failures

Symptom	Cause	Action
The connection settings window opens instead of sign-in	<code>DBConnect.db</code> was not created	Look for <code>MakeDbConnect</code> in the installation log; create the file with <code>--make-dbconnect</code>
Sign-in is impossible, a connection message is shown	The server is unreachable or <code>pg_hba.conf</code> refuses	Check the network, the port and the access rules
A section does not open; the log shows an error about a missing table	Migrations have not been applied	Run <code>upgrade-db.ps1</code>
The sale screen does not open or a document cannot be saved	There is no price list in the database	Create a price list
Nothing can be saved in any section	View-only mode because the licence term has ended	Renew the licence and press “Refresh licence”
A message that the licence is activated on another computer	The machine fingerprint has changed	Activate the program again
The program asks for contact with the activation server	The licence has not been refreshed for more than 14 days	Provide access to <code>accounts.new-imobile.com</code>
The role editor shows an empty list of screens	<code>form_catalog.tsv</code> is missing	Reinstall the package

Symptom	Cause	Action
The receipt is not printed	Python or the pywin32 package is not found	Install Python and set PYTHON_DLL

Writing the connection file without reinstalling:

```
cd "C:\Program Files\Imobile\Meridian\tools"
MeridianDbTool.exe --test-db --server <server> --dbport 5432 --db crm_main
MeridianDbTool.exe --make-dbconnect --path "..\DBConnect.db" --caption "Meridian" --server
    <server> --dbport 5432 --db crm_main
```

Run the commands in a console with administrator rights. Requests to the vendor are submitted through the form at <https://new-imobile.com/contact>; state the program version and the machine fingerprint from the About window.

Document history

Document version	Date	Product version	Change
1.0	2026-10-06	1.1.10.0	First issue