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UniMRCP

Deb Installation Manual

Administrator Guide

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1 Overview

This guide describes how to obtain and install UniMRCP binary packages on Debian-based Linux distributions. The document is intended for system administrators and developers.

1.1 Applicable Versions

Instructions provided in this guide are applicable to the following versions.

UniMRCP 1.4.0 and above

1.2 Supported Distributions

UniMRCP deb packages are currently available for x86_64 (64-bit) architecture only.

Operating System	Released	End of Support
Ubuntu 16.04 LTS (xenial)	March 2017	March 2021
Ubuntu 18.04 LTS (bionic)	May 2019	TBA
Ubuntu 20.04 LTS (focal)	March 2021	TBA

Note: packages for other distributions can be made available upon request. For more information, contact services@unimrcp.org.

1.3 Authentication

UniMRCP binary packages are available to authenticated users only. In order to register a free account with UniMRCP, please visit the following page.

https://www.unimrcp.org/profile-registration

Note: a new account needs to be verified and activated prior further proceeding.

2 Installing Deb Packages Using Apt-Get

Using the APT package handling utility (apt-get) is recommended for installation of UniMRCP binary packages.

2.1 Repository Configuration

Supply login information by creating a file */etc/apt/auth.conf.d/unimrcp.conf* containing the following entry.

```
machine unimrcp.org
 login username
 password password
```

Note: the *username* and *password* fields must be replaced with the corresponding account credentials.

Configure a repository by creating a file */etc/apt/sources.list.d/unimrcp.list* containing the following entry.

```
deb [arch=amd64] https://unimrcp.org/repo/apt/ distr main
```

Note: the *distr* field must be replaced with the corresponding distribution code name such as *xenial*, *bionic*, *focal*, etc. To determine the distribution code, use `lsb_release -cs`.

2.2 GnuPG Key

For verification of binary packages, UniMRCP provides a public GnuPG key, which can be retrieved and installed as follows.

```
wget -O - https://unimrcp.org/keys/unimrcp-gpg-key.public | sudo apt-key add -
```

2.3 Repository Update

In order to check for updates and apply the changes in the APT configuration, use the following command.

```
sudo apt-get update
```

2.4 UniMRCP Client Installation

In order to install the UniMRCP client binaries, including the dependencies, the following command can be used.

```
sudo apt-get install unimrcp-client
```

As a result, apt-get will check and prompt to download all the required packages by installing them in the directory */opt/unimrcp*.

Similarly, for installation of development kit(s), the UniMRCP client libraries and header files, the following command may follow.

```
sudo apt-get install unimrcp-client-dev
```

2.5 UniMRCP Server Installation

In order to install the UniMRCP server binaries, including the dependencies, the following command can be used.

```
sudo apt-get install unimrcp-server
```

As a result, apt-get will check and prompt to download all the required packages by installing them in the directory */opt/unimrcp*.

Similarly, for installation of development kit(s), the UniMRCP server libraries and header files, the following command may follow.

```
sudo apt-get install unimrcp-server-dev
```

In order to install a package containing a set of demo plugins to the UniMRCP server, the following command can be used.

```
sudo apt-get install unimrcp-demo-plugins
```

3 Installing Deb Packages Manually

UniMRCP deb packages can be installed manually using the *dpkg* utility. Note, however, that the system administrator should take care of package dependencies and install all the packages in appropriate order.

The deb packages have the following naming convention:

```
$packagename_$universion-$distr_$arch.deb
```

where

- *packagename* is the name of a package
- *universion* is the UniMRCP version
- *distr* is the distribution code name (trusty, xenial, …)
- *arch* is the architecture (amd64, i386, all, …)

3.1 Package List

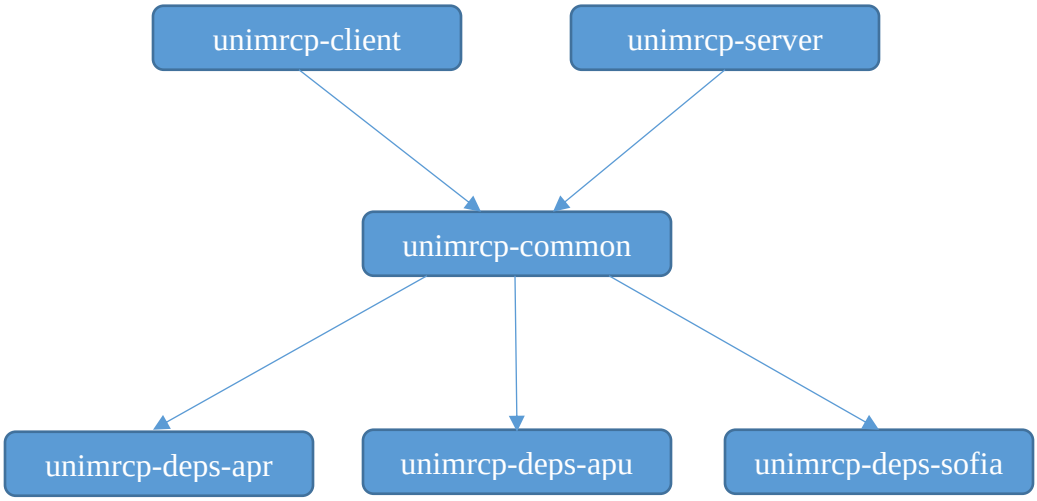
The following is a complete list of deb packages UniMRCP provides.

Package Name	Description
unimrcp-client	Shared libraries and sample applications of the client.
unimrcp-client-dev	Development kit of the client.
unimrcp-server	Shared library and application of the server.
unimrcp-server-dev	Development kit of the server.
unimrcp-demo-plugins	Set of demo plugins to the server. [Optional]
unimrcp-common	Data common for the client and the server.
unimrcp-common-dev	Development kit of the common client and server data.
uniapr	UniMRCP edition of the Apache Portable Runtime (APR) library.
uniapr-dev	Development kit of the corresponding APR library.
uniapr-util	UniMRCP edition of the Apache Portable Runtime Utility (APR-Util) library.

uniapr-util-dev	Development kit of the corresponding APR-Util library.
unisofia-sip	UniMRCP edition of the Sofia SIP library.
unisofia-sip-dev	Development kit of the corresponding Sofia SIP library.

3.2 Package Dependency Graph

The following is a graph of package dependencies.



3.3 Package Installation Order

Packages for the APR, APR-Util and Sofia-SIP libraries must be installed first.

```
sudo dpkg --install uniapr_$aprversion-$distr_$arch.deb
sudo dpkg --install uniapr-util_$apuversion-$distr_$arch.deb
sudo dpkg --install unisofia-sip_$sofiaversion-$distr_$arch.deb
```

Then, a package containing common data for the client and the server should follow.

```
sudo dpkg --install unimrcp-common_$universion-$distr_$arch.deb
```

Based on your requirements, either a client package, or a server package, or both of them can be installed

next.

```
sudo dpkg --install unimrcp-client_$universion-$distr_$arch.deb
sudo dpkg --install unimrcp-server_$universion-$distr_$arch.deb
```

Optionally, a package containing a set of demo plugins to the server may follow.

```
sudo dpkg --install unimrcp-demo-plugins_$universion-$distr_$arch.deb
```

The same order should be considered for the installation of the corresponding development packages.

4 System Daemon

This section outlines how to start/stop the UniMRCP server as a daemon, and applies to 1.5.0 and above.

Upon installation of the UniMRCP server package, a systemd unit file *unimrcp.service* is installed in the directory */lib/systemd/system* and can be used as follows.

4.1 Starting Daemon

```
systemctl start unimrcp.service
```

4.2 Stopping Daemon

```
systemctl stop unimrcp.service
```

4.3 Retrieving Daemon Status

```
systemctl status unimrcp.service
```

4.4 Setting Auto-start on Next Boot

```
systemctl enable unimrcp.service
```