



TeamDrive Web Portal Administration

Release 5.0.0.0

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2024

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INTRODUCTION

This document will guide you through the administration and advanced configuration of a TeamDrive Web Portal. When managing the TeamDrive Web Portal, we assume that you have basic knowledge of:

- **Linux system administration:**
 - Adding/configuring software packages
 - Editing configurations files
 - Creating user accounts
 - Assigning file ownerships and privileges
 - Creating and mounting file systems
 - Setting up environment variables
- Apache Web Server: installation and configuration, adding and enabling modules, modifying configuration files
- MySQL Database: installation and configuration, administration/maintenance, using the MySQL command line client, basic SQL
- Basic knowledge of application server technology

TEAMDRIVE WEB PORTAL ADMINISTRATION

4.1 Disabling the Apache Access Log

In the default setup, Apache is used as a reverse proxy to route all calls from the TeamDrive browser App to the TeamDrive Agent of the user. This can generate a large number of requests so there is no point in keeping the normal access log activated. We therefore recommend deactivating it in a production environment. Only the error log should be left enabled. To facilitate this, comment out the following line in the default `httpd.conf`:

```
# CustomLog logs/access_log combined
```

If problems occur, logging can be activated for a specific user (see http://httpd.apache.org/docs/2.4/mod/mod_log_config.html). e.g. all access to TeamDrive Agent using port 49153 will be logged (the required Apache logging module needs to be enabled again):

```
SetEnvIf Request_URI 49153 agent-49153  
CustomLog logs/agent-49153-requests.log common env=agent-49153
```

Restart the Apache instance and check the log files for errors.

You can discover the port used by an agent by using the command:

```
[root@webportal ~]# systemctl status webportal*
```

The port used is visible in the command line parameter `http-api-port`.

4.2 Changing an Admin User's Password

The Web Portal Administration Console can be accessed by all Admin Users by entering the correct username and password.

An existing user with administrative privileges can change his password directly via the Administration Console's login page or via the **Admin Users** page of the Administration Console.

On the login page, click on **Change Password...** to enable two input fields **New Password** and **Repeat Password** that allow you to enter the new password twice (to ensure you did not mistype it by accident). You also need to enter your username in the **Username** field and the current password in the **Password:** field above. Click **Login and Change Password** to apply the new password and log in.

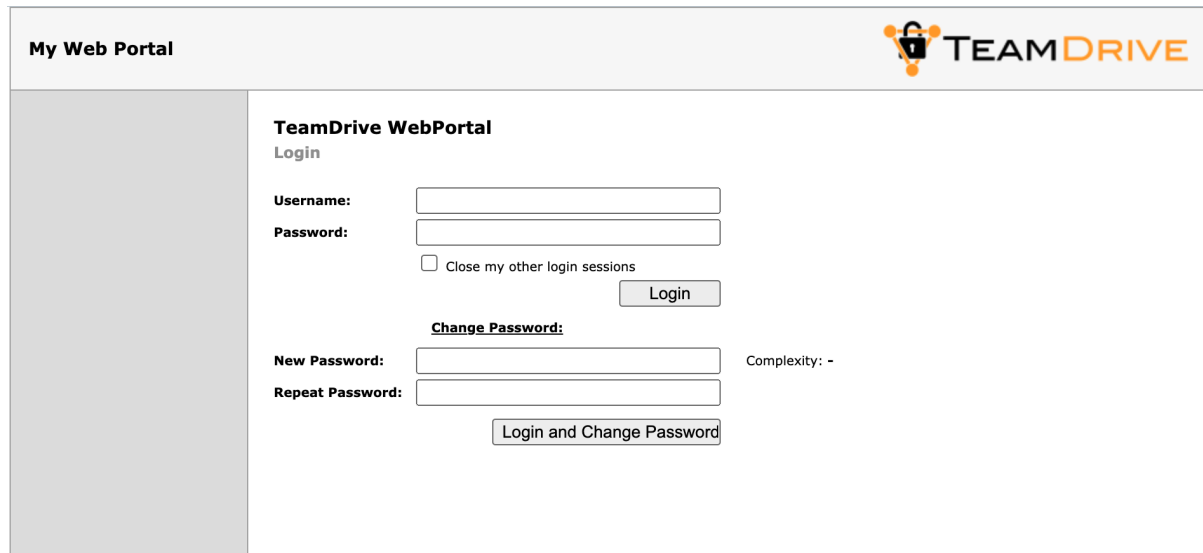
You can also change your password while being logged into the Administration Console. If your user account has "Superuser" privileges, you can change the password of any admin user, not just your own one.

Click **User List** to open the user administration page.

The page will list all existing user accounts and their details.

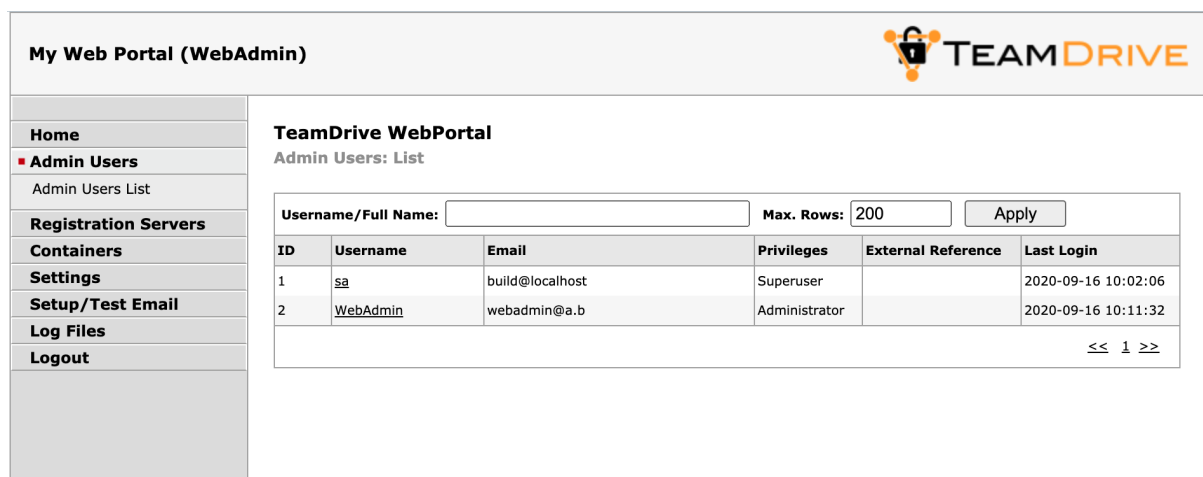
Click the username of the account you want to modify. This will bring up the user's details page.

To change the password, enter the new password into the input fields **New Password** and **Repeat Password** and click **Save** to commit the change.



The screenshot shows the 'My Web Portal' header with the TeamDrive logo. The main content area is titled 'TeamDrive WebPortal' and contains a 'Login' section with fields for 'Username:' and 'Password:', a checkbox for 'Close my other login sessions', and a 'Login' button. Below this is a 'Change Password:' section with fields for 'New Password:' and 'Repeat Password:', a 'Complexity: -' indicator, and a 'Login and Change Password' button.

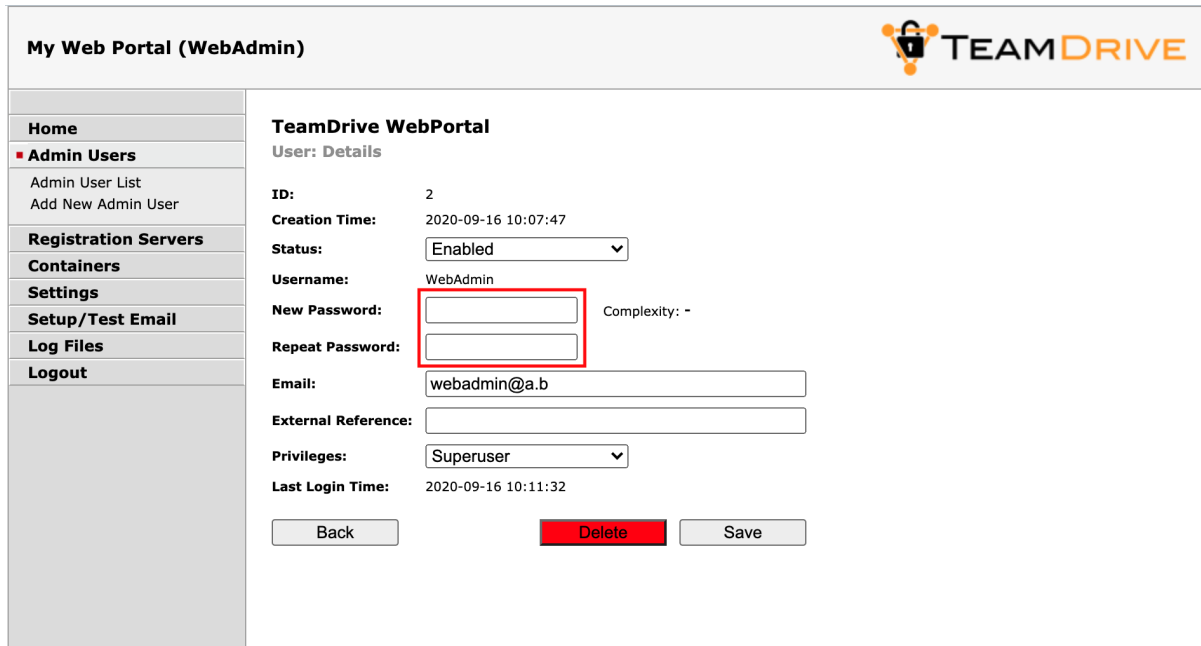
Fig. 4.1: Web Portal Administration Console: Change Password



The screenshot shows the 'My Web Portal (WebAdmin)' header with the TeamDrive logo. A left sidebar contains navigation links: Home, Admin Users (selected), Admin Users List, Registration Servers, Containers, Settings, Setup/Test Email, Log Files, and Logout. The main content area is titled 'TeamDrive WebPortal' and contains 'Admin Users: List'. It features a search bar for 'Username/Full Name:', a 'Max. Rows:' dropdown set to '200', and an 'Apply' button. Below is a table with columns: ID, Username, Email, Privileges, External Reference, and Last Login. The table contains two rows of data. At the bottom right of the table is a pagination control showing '<< 1 >>'.

ID	Username	Email	Privileges	External Reference	Last Login
1	sa	build@localhost	Superuser		2020-09-16 10:02:06
2	WebAdmin	webadmin@a.b	Administrator		2020-09-16 10:11:32

Fig. 4.2: Web Portal Administration Console: Admin Users List



My Web Portal (WebAdmin)

TeamDrive WebPortal

User: Details

ID: 2

Creation Time: 2020-09-16 10:07:47

Status:

Username: WebAdmin

New Password: Complexity: -

Repeat Password:

Email:

External Reference:

Privileges:

Last Login Time: 2020-09-16 10:11:32

Fig. 4.3: Web Portal Administration Console: User Details

The new password will be required the next time this user logs into the Administration Console.

In case you lost or forgot the password for the last user with Superuser privileges (e.g. the default HostAdmin user), you need to reset the password by removing the current hashed password stored in the MySQL Database (Column Password, located in Table webportal.WP_Admin). This can be performed using the following SQL query.

Log into the MySQL database using the teamdrive user and the corresponding database password:

```
[root@webportal ~]# mysql -u teamdrive -p
Enter password:

[...]

mysql> use webportal;
Database changed

mysql> SELECT * FROM WP_Admin WHERE UserName='WebAdmin'\G
***** 1. row *****
      ID: 1
    Status: 0
  UserName: WebAdmin
      Email: root@localhost
    Password: $2y$10$JIhziNetygYCeIXU3gXveue2BTqwCs4vwA6LHNUKZVt8V.U8jtkcW
ExtReference: NULL
  Privileges: Superuser
CreationTime: 2015-08-10 11:26:10
LastLoginTime: 2015-08-10 11:53:06
1 row in set (0.00 sec)

mysql> UPDATE WP_Admin SET Password='' WHERE UserName='HostAdmin';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> quit
Bye
```

Now you can enter a new password for the HostAdmin user via the login page as outlined above, by clicking

the **Change Password** link, but leaving the **Password** field empty and only entering the new password twice, followed by clicking the **Login and Change Password** button.

4.3 Configure proxy for outgoing connections for the TeamDrive Agent

To use a proxy for outgoing connections add the following option to the `ClientSettings` setting (teamdrive agent 4.6.11 build 2640 or newer required):

```
http-proxy=http://proxy.example.com:80/
```

The change only takes effect once a running agent has been restarted.

4.4 How to Enable Two-Factor Authentication

Two-factor authentication (2FA) can be enabled at two different areas:

- 2FA for the Web Portal Administrators
- 2FA for the users of the Web Portal

How to enable two-factor authentication for administrators is described in the section below (*Enabling Two-Factor Authentication for Administrators* (page 11)).

Two-factor authentication (2FA) for the Web Portal users requires the Registration Server version 3.6 or later. 2FA is implemented by the Registration Server using a One-Time-Pin send by mail or the Google Authenticator App (<https://support.google.com/accounts/answer/1066447?hl=en>).

2FA for users can be enabled by the user in the TeamDrive UI.

As described in *Web Portal Settings* (page 21), these settings default to login and registration pages provided by the Web Portal. The Web Portal pages redirect to the associated pages provided by the Registration Server.

On the Registration Server the pages, can be optionally customised using the template system. The templates to be modified are: `portal-login`, `portal-lost-pwd`, `portal-register`, `portal-activate`, `portal-login-ok`, `portal-goog-auth-setup`, `portal-goog-auth-login`, and `portal-goog-auth-login-ok`.

If you would like to allow users to register directly via the Web Portal, then set `RegistrationEnabled` to `True`.

Note: Please check the `apache ssl.conf` for the additional `RewriteRule` in case you updated from WebPortal 1.0.5 to a newer version:

```
RewriteRule ^/portal(.*)$ /yvva/portal$1 [PT]
```

See `configure-mod-ssl` for details.

On the Registration Server you must add the domain name of the Web Portal (as specified by `WebPortalDomain`) to `Provider` setting `API_WEB_PORTAL_IP`. Modify this setting by adding the domain name on a line beneath the IP Address of the Web Portal which you have already set (as described in `associate_portal_provider`).

If the Web Portal is used by several Providers, only modify the `API_WEB_PORTAL_IP` setting of one of the Providers. This will be the default Provider for users that register directly via the Web Portal.

4.5 Enabling Two-Factor Authentication for Administrators

The Web Portal Administration Console supports two-factor authentication via email. In this mode, an administrator with “Superuser” privileges that logs-in with his username and password must provide an additional authentication code that will be sent to him via email during the login process. This feature is disabled by default.

The TeamDrive Web Portal needs to be configured to send out these authentication email messages via SMTP. The Web Portal is only capable of sending out email using plain SMTP via TCP port 25 to a local or remote MTA.

If your remote MTA requires some form of encryption or authentication, you need to set up a local MTA that acts as a relay. See chapter *Installing the Postfix MTA* in the *TeamDrive Web Portal Installation Guide* for details.

Before you can enable two-factor authentication, you need to set up and verify the Web Portal’s email configuration. This can be accomplished via the Host Server’s Administration Console. You need to log in with a user account having “Superuser” privileges in order to conclude this step.

Click **Setup / Test Email** to open the server’s email configuration page.

The screenshot shows the 'My Web Portal (sa)' interface. On the left, a sidebar lists navigation options: Home, Admin Users, Registration Servers, Containers, Settings, **Setup/Test Email** (highlighted with a red box), Log Files, and Logout. The main content area is titled 'TeamDrive WebPortal' and 'Email Setup/Test'. It contains six configuration fields, each with an information icon (i):

- SMTP Server:** localhost
- Send Timeout (seconds):** 5
- Sender Email Address:** postmaster@yourdomain.com
- Reply-To Email Address:** noreply@yourdomain.com
- Email Sending Host:** webportal.yourdomain.com
- Email Address:** admin@yourdomain.com

At the bottom right of the form is a button labeled 'Send Test Email'.

Fig. 4.4: Web Portal Admin Console: Email Setup / Test

Fill out the fields to match your local environment:

SMTP Server: The host name of the SMTP server accepting outgoing email via plain SMTP. Choose `localhost` if you have set up a local relay server.

Send Timeout: The timeout (in seconds) that the mail sending code should wait for a delivery confirmation from the remote MTA.

Sender Email Address: The email address used as the Sender email address during the SMTP delivery, e.g. `postmaster@yourdomain.com`. This address is also known as the “envelope address” and must be a valid email address that can accept SMTP-related messages (e.g. bounce messages).

Reply-To Email Address: The email address used as the “From:” header in outgoing email messages. Depending on your requirements, this can simply be a “noreply” address, or an email address for your ticket system, e.g. `support@yourdomain.com`.

Email Sending Host: The host name used in the HELO SMTP command, usually your Web Portal’s fully qualified domain name.

Email Address: The primary administrator’s email address. This address is the default recipient for all emails that don’t have an explicit receiving address. During the email setup process, a confirmation email will be sent to this address.

After you've entered the appropriate values, click **Send Test Email** to verify the email setup. If there is any communication error with the configured MTA, an error message will be printed. Check your configuration and the MTA's log files (e.g. `/var/log/maillog` of the local Postfix instance) for hints.

If the configuration is correct and functional, a confirmation email will be delivered to the email address you provided. It contains an URL that you need to click in order to commit your configuration changes. After clicking the URL, you will see a web page that confirms your changes.

This concludes the basic email configuration of the Web Portal. Now you can enable the two-factor authentication by clicking **Settings** -> **UseTwoFactorAuth**. Change the setting's value from `False` to `True` and click **Save** to apply the modification.

The screenshot shows the 'My Web Portal (sa)' admin console. On the left is a sidebar menu with options: Home, Admin Users, Registration Servers, Containers, Settings (highlighted), Admin Console, API, Authentication, Docker Settings, Email Settings, General Settings, Outgoing Connections, Build Image, Setup/Test Email, Log Files, and Logout. The main content area is titled 'TeamDrive WebPortal Settings: Details'. It shows a setting named 'UseTwoFactorAuth' with a 'Value' of 'False' (indicated by a selected radio button). A red box highlights the 'True' radio button. Below the setting are 'Back' and 'Save' buttons. An information icon and text state: 'UseTwoFactorAuth: Set to True to enable 2-Factor Authentication for Superusers. Additional informations can be found in the [documentation](#)'.

Fig. 4.5: Web Portal Admin Console: Use Two-Factor Authentication

Now two-factor authentication for the Administration Console has been enabled.

The next time you log in as a user with “Superuser” privileges, entering the username and password will ask you to enter a random secret code, which will be sent to you via email to the email address associated with your administrator account. Enter the code provided into the input field **Authentication Code** to conclude the login process.

4.6 Changing the MySQL Database Connection Information

The Web Portal Apache module `mod_yvva` as well as the `yvvad` daemon that performs the `td-webportal` background tasks need to be able to communicate with the MySQL management database of the Web Portal.

If you want to change the password of the `teamdrive` user or move the MySQL database to a different host, the following changes need to be performed.

To change the MySQL login credentials, edit the file `/etc/td-webportal.my.cnf`. The password for the `teamdrive` MySQL user in the `[tdweb]` option group must match the one you defined earlier:

```
[tdweb]
database=webportal
user=teamdrive
password=<password>
host=127.0.0.1
```

If the MySQL database is located on a different host, make sure to modify the `host` variable as well, providing the host name or IP address of the host that provides the MySQL service. If required, the TCP port can be changed from the default port (3306) to any other value by adding a `port=<port>` option.

4.7 Configuring Active Directory / LDAP Authentication Services

The Web Portal supports login using an External Authentication Service, for example Microsoft AD or LDAP.

Note: This section refers to the login of the TeamDrive users as apposed to the administrators of the Web Portal, which is described in the section: *Administrator Login using External Authentication* (page 13) below.

Whether to use such a service is automatically determined depending on the username or email address entered during login. This is assuming you are using the TeamDrive Agent version 4.6.11.2656 or later.

Unlike the TeamDrive client, or standalone TeamDrive Agent, you cannot login to the Web Portal without an existing user account. Registration is possible if you provide a “registration URL”, by setting `RegistrationURL`.

External authentication is used if a user belongs to a Registration Server provider that has enabled external authentication by setting `USE_AUTH_SERVICE` to `True`, and by specifying `AUTH_LOGIN_URL` and `VERIFY_AUTH_TOKEN_URL` URLs. Alternatively the email of the user is associated with named external authentication service. This is explained in how to manager domains and services on the Registration Server 4.5.

Please refer to **Configuring External Authentication using Microsoft Active Directory / LDAP** in the **TeamDrive Registration Server Administration Guide** for details of how to setup an External authentication service. In this document we describe only the aspects that are relevant to the Web Portal.

Exclusive use of a particular external authentication service is still supported by the Web Portal. This is activated by setting `AuthServiceEnabled` to `True`. When set to `True`, the Web Portal will immediately redirect users to the the external service login page as specified by the `AuthLoginPageURL` setting (see also *AuthTokenVerifyURL* (page 23)). This limits the Web Portal login to only users of this external service, and is mostly supported for backwards compatibility with versions of the Web Portal before version 2.0.5.

In order for for a Web Portal to access a external authentication service you must register the domain of the Web Portal with the external service. This is done by adding the domain of the portal domain to the `$allowed_origins` configuration parameter of the external service. For example:

```
$allowed_origins = array(
    "localhost:45454",
    "127.0.0.1:45454",
    "shop.domain.com",
    "webportal.domain.com");
```

Where `webportal.domain.com` is the domain of the Web Portal, as specified by the `WebPortalDomain` setting.

Note that in older versions of the external authentication service (Registration Server 3.6), the configuration parameter `$webportal_domain` was used in place of `$allowed_origins`. This implementation was restricted to the support of one login origin (for example one Web Portal), and should by upgraded to support multiple sources.

Note that the external login page can no longer be embedded in the TeamDrive Agent GUI as of Web Portal version 3.1.2. This is because most external authentication services do not support embedding in a `iFrame` for security reasons (for example Microsoft Azure). As a result, the `UseEmbeddedLogin` setting was removed in version 3.1.2.

4.8 Administrator Login using External Authentication

The Administration Console of the Web Portal may use External Authentication such as LDAP or Active Directory. If the administrators of the Web Portal are stored and managed by such a service then it is possible to have the user credentials checked by the server, rather than stored and checked by the Web Portal database.

There are two system settings that control this behaviour: `ExtAuthEnabled` and `ExtAuthURL`. `ExtAuthEnabled` must be set to `True`. `ExtAuthURL` specifies a URL that will verify the external authentication.

On login, if external authentication is enabled, the Web Portal will perform a HTTP POST to the URL specified by `ExtAuthURL`, passing two parameters: `username` and `password`. The page is expected to return an XML reply of the following form:

```
<?xml version='1.0' encoding='UTF-8'?>
<teamdrive>
<user>
<id>unique-user-id</id>
<email>users-email-address</email>
</user>
</teamdrive>
```

If an error occurs, for example an “Incorrect login”, then the `ExtAuthURL` page must return:

```
<?xml version='1.0' encoding='UTF-8'?>
<teamdrive>
<error>
<message>error-message-here</message>
</error>
</teamdrive>
```

Such a page can be easily implemented in PHP, for instance. An example implementation of the `ExtAuthURL` page for LDAP and Active Directory is available upon request from TeamDrive Systems (please contact sales@teamdrive.com).

4.9 Web Portal Backup Considerations

The extent to which backup and failover is performed depends entirely on the service level you wish to provide.

In order to secure the configuration of the Web Portal, you must make a backup of the `webportal` MySQL database. Loss of the database will require a complete re-install of the Web Portal.

Quick recovery from failure of the Web Portal can be provided by replicating the `webportal` database to a standby machine.

You should also ensure that you have a backup of all the configuration files describe here: `config_files`. However, these files are rarely changed after the initial setup.

A standby host is also recommended if a high level of availability is required. If the contents of the `ContainerRoot` is lost due to disk failure, or failure of the host, users will have to re-enter their Spaces after they log into the Web Portal again. The only data that will be lost in this case are files that were being uploaded when the failure occurred, All other Space data is stored by the TeamDrive Hosting Service, and can be recovered from there.

In order to ensure a high level of availability, a standby host may be used, and the contents of the `ContainerRoot` path can be copied to the standby system using `rsync`. Alternatives depend on the type of volume mounted at `ContainerRoot`. If the file system has sufficient redundancy and can be mounted by the standby system at any time, then no further consideration are required.

4.10 Setting up Server Monitoring

It's highly recommended to set up some kind of system monitoring, to receive notifications in case of any critical conditions or failures.

Since the TeamDrive Web Portal is based on standard Linux components like the Apache HTTP Server and the MySQL database, almost any system monitoring solution can be used to monitor the health of these services.

We recommend using Nagios or a derivative like Icinga or Centreon. Other well-established monitoring systems like Zabbix or Munin will also work. Most of these offer standard checks to monitor CPU usage, memory utilization, disk space and other critical server parameters.

In addition to these basic system parameters, the existence and operational status of the following services/processes should be monitored:

- The MySQL Server (system process `mysqld`) is up and running and answering to SQL queries
- The Apache HTTP Server (`httpd`) is up and running and answering to http requests (this can be verified by accessing <https://webportal.yourdomain.com/index.html> and <https://webportal.yourdomain.com/admin/index.html>)
- The `td-webportal` service is up and running (process name `yvvad`)

4.11 Scaling a TeamDrive Web Portal Setup

When scaling the TeamDrive Web Portal we consider each component individually. There are three components that are relevant to this discussion: the Apache Web Server, the MySQL Database and the Load Balancer.

The simplest configuration places all components on one machine. This is the case which is largely described in this document. In this case, the Apache Web Server also fulfills the function of the Load Balancer. This is done by re-write rules which direct calls from the Web client to The associated TeamDrive Agent.

4.11.1 Apache Web Server

The Apache Web Server host is responsible for the management of the Web Portal. This includes: the Login page, the Administration Console and the background tasks.

The scaling requirements of this component are relatively limited as the task do not require much resources in terms of CPU, memory or disk space.

This means that a “scale-up” of the Apache Web Server host is probably quite sufficient to cope with a growing number of users.

Nevertheless, if the Web Portal access patterns require it, or simply to add redundancy it is possible to scale-out the Apache Web Server, by adding additional machines that run the identical Web Portal software.

In this case a Load Balancer is required to distribute requests to the various Apache hosts. This can be done on a simple round-robin basis or according to current load since the connections are stateless.

The Web Portal service which runs the various background task should be started on all Apache hosts.

The MySQL Database must also be moved to a separate system. See below for more details.

4.11.2 MySQL Database

Load on the database, and the volume of data is minimal on the Web Portal. For this reason, it should suffice to place the MySQL database on a dedicated server as the load increases on the Web Portal. Additional CPU's and memory can then be added to this system as required.

As mentioned above, if the Apache Web Server is scaled out, then it is necessary to place the MySQL database on a separate system even if this is not required for load reasons. If this is not done then the MySQL database can remain on the same system as The Apache Web Server.

4.12 Upgrading from a Docker based to a Docker less Web Portal

To update a Web Portal Virtual Appliance Installation with CentOS 7 and Docker to a Docker less CentOS 8 version a few preparations steps are necessary:

1. Remove **all** Docker Container **and** Images
2. Uninstall Docker **and** clean up the filesystem
3. Remove Docker Volume **and** use the free space to extend the var-Partition
4. Upgrade **from CentOS 7** to 8
5. Follow the instruction to update the Web Portal

Stop the Apache to make sure, that now user can use the web portal during the upgrade:

```
service httpd stop
```

Remove all Docker Container and Images:

```
docker stop $(docker ps -aq)
docker rm $(docker ps -aq)
docker rmi $(docker images -q)
```

Uninstall Docker (without the td-webportal package) and clean up the filesystem:

```
yum remove docker docker-client docker-client-latest docker-common docker-latest_
↪docker-latest-logrotate docker-logrotate docker-engine docker-ce docker-ce-cli_
↪containerd.io -- -td-webportal
/bin/rm /var/lib/docker/ -R
```

Remove Docker Volume and extend the free space to the Logical Volume lv_var volume which is too small for the CentOS 8 upgrade step:

```
vgchange -a n vg_docker
vgremove vg_docker
pvremove /dev/sda3
vgextend vg_centos7 /dev/sda3
lvextend -l +100%FREE /dev/mapper/vg_centos7-lv_var
xfs_growfs /dev/mapper/vg_centos7-lv_var
reboot
```

Follow the instruction (only the first chapter for Upgrade CentOS 7 to CentOS 8) and start with step 2 (step 1 can be skipped):

```
https://techviewleo.com/how-to-migrate-from-centos-7-to-rocky-linux-8/
```

Step 4 can be skipped and at step 7 use:

```
dnf install --allowdowngrading http://mirrors.advancedhosters.com/centos/8-stream/
↪BaseOS/x86_64/os/Packages/{centos-stream-repos-8-3.el8.noarch.rpm,centos-stream-
↪release-8.6-1.el8.noarch.rpm,centos-gpg-keys-8-3.el8.noarch.rpm}
```

because the vault.centos.org repo for CentOS 8 is not longer active.

The first action at Step 8 “Update CentOS 8 repositories” can be skipped. Proceed with “Remove the current CentOS Kernel” and before starting the CentOS 8 system upgrade, remove the following conflicting packages:

```
dnf remove NetworkManager
dnf remove dracut-network
dnf remove python36-rpmconf
```

and disable the old td-webportal-repos which are not available for CentOS 8:

```
dnf install dnf-plugins-core --disablerepo=td-webportal*
dnf config-manager --set-disabled td-webportal-1.0
dnf config-manager --set-disabled td-webportal-1.1
dnf config-manager --set-disabled td-webportal-1.2
dnf config-manager --set-disabled td-webportal-2.0
```

After the upgrade check the system info:

```
less /etc/centos-release
```

which should be now CentOS Stream release 8. Proceed with the following chapter to update the TeamDrive Web Portal itself.

4.13 Upgrading the TeamDrive Web Portal

There are a number of aspects to upgrading the TeamDrive software used by the Web Portal: the Web Portal software, the structure of the MySQL database and the TeamDrive agent used by the Web Portal.

There is a dependency between two TeamDrive agent and the Web Portal because the Web Portal services the Web application that makes calls to the TeamDrive Agent. The Web Portal requires a `MinimumAgentVersion` and will make sure that you are running the required version of the TeamDrive Agent.

Since the TeamDrive agent is always backwards compatible with the Web application, you are free to use a more recent version than required. How to upgrade the TeamDrive agent is described in the following section: *Upgrading the Database Structure and TeamDrive Agent* (page 17).

Upgrading the TeamDrive Web Portal by first downloading the updated repository:

```
[root@webportal ~]# wget -O /etc/yum.repos.d/td-webportal.repo \
https://repo.teamdrive.net/td-webportal.repo
```

Update the Web Portal packages using the RPM package manager:

```
[root@webportal ~]# dnf update td-webportal yvva
```

An update simply replaces the existing packages while the service is running, and the services (`httpd` and `td-webportal`) are automatically restarted afterwards.

Please add the new configuration line:

```
Set flock mutex
```

in the apache `httpd.conf` file as described here [update-httpd-conf](#) and make sure, that the apache prefork mode will be used as described in this chapter [enable-prefork-mode](#)

After the packages are updated proceed with the next section to update database structure and the TeamDrive Agent.

Check the chapter [releasenotes](#) for the changes introduced in each new version. The release notes may also contain important notes that effect the upgrade itself.

4.14 Upgrading the Database Structure and TeamDrive Agent

The `upgrade_now` command described below performs two functions: it upgrades the MySQL database structure and updates the TeamDrive Agent used by the Web Portal.

Users are prevented from accessing the Web Portal until upgrade is completed, but running the `upgrade_now` command (see below).

In addition, some errors may occur in both the Web Portal API and the Admin Console until this command has been executed. As a result, it is recommended that this step is performed immediately after the upgrade of the Web Portal software.

The TeamDrive Agent image used is stored in the `ContainerImage` setting and is set to the minimum required agent version by default (see `MinimumAgentVersion`).

This means that the TeamDrive Agent image will automatically be updated when you manually increase the ContainerImage version number or the MinimumAgentVersion is greater than the version of the image in use.

The upgrade of a TeamDrive Agent image cannot occur “in-place”. All running TeamDrive Agents will be stopped during the update and when the users login again, the new TeamDrive Agent image will be started.

After you have installed the Web Portal software for the first time or after a software upgrade start the yvva command line executable, and enter `upgrade_now;;`.

This command first performs any necessary database changes and then automatically downloads and installs the required TeamDrive agent:

```
[root@webportal ~]# yvva
Welcome to yvva shell (version 1.5.18).
Enter "go" or end the line with ';' to execute submitted code.
For a list of commands enter "help".

UPGRADE COMMANDS:
-----
To upgrade from the command line, execute:
yvva --call=upgrade_now --config-file="/etc/yvva.conf"

Database structure out of date, upgrade required.

upgrade_now;;
Upgrade the database structure and the Agent sandbox (this command cannot be
↪undone).
```

After successfully updating the agent the value of ContainerImage will be set accordingly, for example: `teamdrive/agent:4.7.3.3054-TMDR`.

4.15 Move /teamdrive to external volume

The user data for the TeamDrive agents is located in /teamdrive and this will be the largest part of the necessary storage for hosting the Web-Portal.

4.16 Upgrading a custom installation from Version 1.1 to 1.2

Note: This step is only necessary when updating from a version 1.1 or below to version 1.2 (or later) to define your *Build Image* (page 30) settings. Once you set your build settings, the update process is identical to the normal update process, just run: `upgrade_now;;` on the yvva command line.

The “White Label” GUI Web Portal RPM is no longer necessary and the existing package must be removed. Search for the old installed packages:

```
[root@webportal ~]# rpm -qa | grep "webportal-clientui"
```

and remove all listed packages using:

```
[root@webportal ~]# rpm -e <full package name>
```

Now download the updated repository:

```
[root@webportal ~]# wget -O /etc/yum.repos.d/td-webportal.repo \
https://repo.teamdrive.net/td-webportal.repo
```


and update the Web Portal packages using the RPM package manager:

```
[root@webportal ~]# yum update td-webportal yvva
```

The Web Portal version 1.2 or later is capable of builds the required agent image automatically. The description below assumes you are using a customised version of the TeamDrive Agent executable, or the Web-GUI.

Use the `yvva` command line (see below) or the Web Admin to fill in your *Build Image* (page 30) product information.

The following required values are necessary to build a customised agent image:

- **BuildProductName:** The first part of the Agent archive (the tar.gz file). This value should be all lower-case. If not, please contact TeamDrive support.
- **BuildProviderCode:** Your 4 letter Provider code.

In addition to set these values, it may be necessary to modify the following settings:

- **AgentDownloadURL:** By default this is the link to the TeamDrive download portal:

```
https://download.teamdrive.net/{VERSIONSHORT}/{PROVIDERCODE}/linux-x86_64/  
→{PRODUCTNAME}_agent_{VERSION}_el8.x86_64.tar.gz
```

See *AgentDownloadURL* (page 31) for a detailed description of this value. If your Agent archive is not located on the TeamDrive portal, then you should set the URL accordingly.

The **{PROVIDERCODE}** placeholder will be replaced by the value you set for `BuildProductName`.

{VERSION} will be replaced by the highest version specified by the `ContainerImage` and `MinimumAgentVersion` settings.

- **DISTRIBUTORFile:** The content for the DISTRIBUTOR file for the agent. If left empty the DISTRIBUTOR file from the Agent archive (.tar.gz file) will be used.

To set your build settings using the `yvva` command line: Start `yvva` as `root` user and replace the following placeholders `<your-...>` with your values:

```
AppSetting:setSetting("BuildProductName", "<your-product-name>");;  
AppSetting:setSetting("BuildProviderCode", "<your-provider-code>");;
```

to verify your values execute:

```
print AppSetting:getSettingAsString("BuildProductName");;  
print AppSetting:getSettingAsString("BuildProviderCode");;
```

The optional parameters, `AgentDownloadURL` and `DISTRIBUTORFile` can be a set in a similar manner (line breaks are permitted in strings).

However, it is easier to change settings like `DISTRIBUTORFile` in the Web Portal Admin Console.

After these values have been set correctly, you can build a new Docker images by starting the `yvva` command line, and running the following command:

```
upgrade_now;;
```

The Web Portal will try to download the required Agent archive version and prepare the Agent image for execution. The individual steps will be logged to the console and an error messages displayed if the process fails.

In case that the download fails or if you want to skip the download step, place your Agent archive in the “archives” directory in the `ServerRoot` folder. The update process will then use this to create the Agent execution image. The image is then used to retrieve and update the Web-GUI as required.

More information on the process is provided in the section *installing-agent-image*.

WEB PORTAL SETTINGS

This chapter lists and describes the available configuration options for the TeamDrive Web Portal.

You can review and modify most of these via the TeamDrive Web Portal Admin Console by clicking **Settings**. Some settings are marked as read-only (“R/O”), they can not be changed.

The settings are grouped into sections:

5.1 Admin Console

5.1.1 ExtAuthEnabled

Set this value to `True` to enable external authentication for the Administration Console. This should not be confused with the use of external authentication used by users of the Web Portal. See *Administrator Login using External Authentication* (page 13) for details.

5.1.2 ExtAuthURL

This is the URL that is used by the Web Portal to verify the login of an Administrator, when using External Authentication. See *Administrator Login using External Authentication* (page 13) for details.

5.1.3 ForceHTTPSUsage

Set to `True` if the Web Portal Admin Console must be accessed using HTTPS.

5.1.4 Language

This is the default language used by the Web Portal Admin Console.

5.1.5 MaxRecordsDisplayed

This setting determines the maximum number of records that may be retrieved from the database at any time. This parameter may only be changed by a Superuser.

5.1.6 SessionTimeout

This is the idle time in seconds after which you are required to login to the Web Portal Admin Console again.

5.1.7 UseTwoFactorAuth

Set to `True` to enable two-factor authentication for Superusers.

Note that this setting only applies to the user of the Web Portal Admin Console. The setting has nothing to do with the use of two-factor authentication used by the users of the portal. This is described in the section: [How to Enable Two-Factor Authentication](#) (page 10).

5.2 API

5.2.1 APIAccessList

A list of IPs which are allowed to access the API of the Web Portal.

5.2.2 APIChecksumSalt

To detect “man in the middle” attacks when sending API requests to the Web Portal, a random “salt value” is generated during the initial installation. The sender must add this salt value to his request before calculating the MD5 hash value of the API request content which will be sent to the Web Portal.

The checksum will be included in the URL, so that the Web Portal can check if the content was modified during the transport.

This setting is read-only and can not be changed via the Admin web interface.

5.3 Authentication

5.3.1 AuthLoginPageURL

This is URL of the login page which is used to login using the external Authentication Service. See [Configuring Active Directory / LDAP Authentication Services](#) (page 13) for details.

When `AuthServiceEnabled` is `True`, the Web Portal login page: `https://webportal.yourdomain.com/portal/login.html`, redirects to the page specified by this setting.

If `AuthServiceEnabled` is `True`, but this setting has no value, then the Portal Login page provided by the Registration Server (version 3.6 or later) is used by default.

The Registration Server Portal Login page also allows the use of Two-factor authentication using the Google Authentication App. In this case, Two-factor authentication can be setup using the page: `https://webportal.yourdomain.com/portal/setup-2fa.html`, which redirects to the web-page that provides this service on the Registration Server.

The Registration Server Portal pages are customisable using the templates provided. Details are available in the Registration Server documentation.

5.3.2 AuthServiceEnabled

Since version 2.0.5 of the Web Portal, the setting is only required if you want to use a specific Authentication Service.

If `AuthServiceEnabled` is `False` the Web Portal automatically uses external authentication as required by the user, provided you are using TeamDrive Agent 4.6.11.2656 or later (WEBCLIENT-335).

The 4.6.11.2656 agent, first requires the user to enter an email (or username), and then based on this input the user is directed to the standard TeamDrive login, or the user’s external authentication service.

Note that the domain of the Web Portal must be registered with all External Authentication services used by the users of the portal. This is done by adding the domain of the Web Portal to the `$allowed_origins` configuration setting of the external service.

If your external authentication service does not support this configuration parameter, then it will need to be updated.

When `AuthServiceEnabled` is set to `True`, you must ensure that `AuthLoginPageURL` (see [AuthLoginPageURL](#) (page 22)) and `AuthTokenVerifyURL` ([AuthTokenVerifyURL](#) (page 23)) are set correctly.

Once a Web Portal is configured for external authentication, it no longer supports regular login (i.e. authentication using the Registration Server).

In this case, the user will always be redirected to the external login page, and will not be able to access the standard login page provided by the TeamDrive Agent. This means that only users of this authentication service may then login.

See [Configuring Active Directory / LDAP Authentication Services](#) (page 13) for further using external authentication services.

5.3.3 AuthTokenVerifyURL

This URL is used to verify the token returned by the Authentication Service after success login by a TeamDrive user. See [Configuring Active Directory / LDAP Authentication Services](#) (page 13) for details.

By default, this setting is set to the Registration Server Portal verification URL:
`https://<reg-server-domain>/portal/verify.html`

5.3.4 LicenseBuyURL

This URL will be displayed for a user, if **LicenseProfessionalRequired** is set and the user has no professional license.

5.3.5 LicenseProfessionalRequired

Login at the Web Portal requires a professional license for the user.

5.3.6 RegistrationEnabled

Set to `True` in order to allow users to register directly From the Web Portal. By default this value is set to `False`.

The setting `RegistrationURL` (see [RegistrationURL](#) (page 24)) specifies the URL that provides the registration page.

When `RegistrationEnabled` is set to `True` there are 2 possibilities, depending on whether `AuthServiceEnabled` ([AuthServiceEnabled](#) (page 22)) is set to `True` or `False`.

If `AuthServiceEnabled` is `True`, then registration uses the external Authentication Service mechanism which results in the user being logged-in, immediately after registration.

When `AuthServiceEnabled` is `True`, it is possible to use the customisable registration page provided by the Registration Server (version 3.6 or later). In this case `RegistrationURL` must not be set (see [RegistrationURL](#) (page 24)).

If `AuthServiceEnabled` is `False`, then the TeamDrive Agent Web-GUI provides a “Register Now” button which references this page specified by `RegistrationURL`, in the login dialog.

In this case, the page referenced by `RegistrationURL` is a custom developed web-page which performs registration using the Registration Server API and then redirects to the Web Portal login page:
`https://webportal.yourdomain.com/portal/login.html`.

5.3.7 RegistrationURL

This URL references a Web-page where a user can register as a TeamDrive user. Alternatively, if an external Authentication Service is being used this page allows users to register with this service.

This page will only be used if `RegistrationEnabled` is set to `True`.

The Web Portal register page: `https://webportal.yourdomain.com/portal/register.html`, automatically redirects to the page.

If `RegistrationEnabled` is `True`, but this setting has no value, then the Portal Registration page provided by the Registration Server (version 3.6 or later) is used by default. In this case, `AuthServiceEnabled` (see [AuthServiceEnabled](#) (page 22)) must be set to `True`.

If `RegistrationEnabled` is `True` and `AuthServiceEnabled` is `False` then this setting must reference a custom developed web-page which performs registration using the Registration Server API and then redirects to the Web Portal login page: `https://webportal.yourdomain.com/portal/login.html`.

5.4 Sandbox Settings

5.4.1 ContainerDatabases

This setting allows you to specify an alternative path for the SQLite databases used by the containers. If empty (the default value) then the SQLite database is placed with the rest of the data in the `ContainerRoot` directory.

When specified, the user-specific directory in this location will be mounted in the container under the path: `"/team-drive/dbs"`. However, this path will only be used if you build a new image using the TeamDrive Agent version 4.6.12.2637 or later.

This version of the client supports the `"-database-path"` option which allows you to specify an alternative path for the SQLite database. When `ContainerDatabases` is set, the image build process will automatically add this option to the start parameters of the agent (see `@USEDATABASEPATH`).

5.4.2 ContainerHost

This is the host name which runs the webportal.

5.4.3 ContainerIdleTimeout

This is a timeout value in seconds that determines when the TeamDrive Agent will automatically shutdown. The default value is 15 minutes. This results in the user of the TeamDrive Agent losing their session information, and login is required on the next access.

The value set here specifies the value of the `idle-shutdown-timeout` client setting (see [ClientSettings](#) (page 29)), which is written to the `teamdrive.ini` file.

If a `SharedIniPath` is specified then changes to this setting take effect when a TeamDrive Agent is restarted.

5.4.4 ContainerImage

This is the name of the image that must be used when creating a new TeamDrive Agent. See [Upgrading the Database Structure and TeamDrive Agent](#) (page 17) for details.

Note that if the `MinimumAgentVersion` specifies a TeamDrive Agent version that is higher than the version of the Agent specified by `ContainerImage`, then the TeamDrive Agent used will be determined by `MinimumAgentVersion`.

5.4.5 ContainerRoot

This is the absolute path that reference the directory in which all TeamDrive Agents will store their user data.

Data in this location is stored in a sub-directory for each TeamDrive Agent. The sub-directory name is the user-name.

This user-specific directory is mounted in the TeamDrive Agent for his home-directory. A process sandboxing ensures that the TeamDrive Agent for one user cannot access the data of other users.

5.4.6 ContainerStorageTimeout

This is the time, in minutes, that a TeamDrive Agent must be idle before its storage is removed. Zero means that the TeamDrive Agent storage is never deleted. See *Upgrading the Database Structure and TeamDrive Agent* (page 17) for details.

5.4.7 CurrentGUIVersion

The version of the installed GUI package. The update process will retrieve or build a new TeamDrive Agent (see update process for details). The GUI package will be extracted from this TeamDrive Agent and the HTML pages, images and javascript code will be located in the apache document root. The GUI version should be identical to the ContainerImage version.

5.4.8 ImageUpdateInProgress

This setting will be set to true during the update and users using the webportal will get the hint Upgrade in progress, please try again shortly.

5.4.9 MaxActiveContainer

A parameter to limit the currently active users. Set to 0 to disable the limitation.

5.4.10 MinimumAgentVersion

This setting is specifies the minimum TeamDrive Agent version that is required by the Web Portal. The setting may not be modified. If The current image used by containers has a Agent version that is earlier than MinimumAgentVersion, then upgrade of the containers will be forced by the Web Portal. This means that users may experience a spontaneous logout.

Following upgrade, ContainerImage will be set to the required image.

5.4.11 RemoveIdleContainerTime

This is the time, in seconds, that a TeamDrive Agent container must be idle before it is removed from local storage. Zero means containers are never removed. See *Upgrading the Database Structure and TeamDrive Agent* (page 17) for details.

If cloud storage is in use (see EnableSwapping), then the container is swapped to the cloud storage, after it is removed from local storage. In this case the container is not lost, and can be retrieved from cloud storage the next time the user logs in.

If cloud storage is not in use, then deleting the container results in a loss of the synchronisation state of the Web Portal for the user. This means the user will have to re-enter all spaces after the next login.

5.4.12 RequireLocalEncryption

Set this value to `True` in order to ensure that the all containers of the Web Portal use local encryption (default is `False`).

Note that users will not be able to login to the portal if users do not permit the activation of the Super PIN for their account.

5.4.13 SandboxCommand

Specifies the binary and command line parameters used to run the Agent in a `systemd-sandbox` environment.

5.4.14 SharedIniPath

Used `SharedIniPath` you can specify a global path for the `teamdrive.ini` file which is then used by all TeamDrive Agents.

The recommended value for this settings is `/opt/teamdrive/webportal/shared/`.

When you set this path, the Web Portal will automatically create the `teamdrive.ini` file in the `SharedIniPath` location. If there is a non-empty `teamdrive.ini` file at this path, then you will not be able to set `SharedIniPath` because the Web Portal overwrites the contents of this file.

Do not edit the `teamdrive.ini` file directly. Instead specify the client settings you required using the `ClientSettings` setting (*ClientSettings* (page 29)).

When `SharedIniPath` is used, then changes `ClientSettings` which are written to the `teamdrive.ini` file when a TeamDrive Agent is restarted.

5.5 Container Swapping

When enabled container swapping will transfer user data that have not been used for a certain amount of time to a backup storage. This is done to free up space on the primary storage, used by the Webportal.

This also allows user data to be transfered from one host to another in order to balance load.

Only the state of the user data in the form of the SQLite database, and the changed settings are stored.

5.5.1 AWSProfile

This is the value of the “`-profile`” option for the Amazon CLI (aws). Download:

```
https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html
```

Installation with modified “`bin-dir`” for CentOS9:

```
./aws/install --bin-dir /usr/bin --install-dir /usr/local/aws-cli --update
```

The profile file is necessary for the root-user in `/root/.aws/credentials` and for the apache user in `/usr/share/httpd/.aws/credentials`.

Changes access rights:

```
chmod 755 /usr/share/httpd/.aws
chmod 644 /usr/share/httpd/.aws/credentials

chmod 755 /usr/local/aws-cli -R
```


5.5.2 EnableSwapping

Set to `True` to enable container swapping.

5.5.3 ObjectStoreURL

The URL for accessing the object store.

5.5.4 StorageAccessKey

The object store access key.

5.5.5 StorageBucket

The object store bucket, or a path in the case of a file system (`mount`) backup storage.

5.5.6 StorageSecret

The object store secret.

5.5.7 StorageType

The backup storage type. One of the following: `azure`, `amazon`, `ionos` or `mount`.

5.5.8 SwapBinary

Use this setting to specify an alternative binary CLI (command line interface) for the object store in use.

By default, `/bin/az` is used in the case of `azure`, `/usr/local/bin/aws` is used in the case of `amazon` and `ionos`, and `/bin/cp` is used for `mount` storage.

5.6 Container Syncing

The activate spaces in containers that have not been started for a while may be significantly out of date. This means that when the user logs in, and the container is started that the user must wait for the spaces to complete synchronisation before they can be used.

When container syncing is enabled then the Web Portal will periodically start idle containers so that the active spaces can sync in the background. This operation is performed by the `synchronise_container` task.

The **Synchronise Containers** task runs between 20:00 in the evening and 6:00 in the morning, and will attempt to start all containers requiring synchronisation during this time.

Whether a container needs to be synced is determined as follows:

- If the containers storage is local then: if the container has been idle for longer than 12 hours then it will be synced.
- If the container storage has been swapped to the cloud storage (see [Container Swapping](#) (page 26) above) then: if the container has been idle for longer 4.5 days then it will be synced.

Containers must also be enabled.

Containers that have been swapped to the cloud that are started by **Synchronise Containers** will remain local until they timeout again (see `RemoveIdleContainerTime`).

5.6.1 ContainerRunLimit

Set this value to the maximum number of containers that may be started when containers are started automatically in the background for synchronisation purposes.

The default value is 20.

5.6.2 EnableSyncContainers

Set `EnableSyncContainers` to `True` to enable the container synchronisation feature. The setting is “`True`” by default.

When enabled containers will be started periodically in the background so that active spaces of the user can be synchronised, saving time when the user logs in.

5.6.3 SyncInboxesOnly

Set to `True` if only inbox containers should be synchronised. The default value is “`True`”.

5.6.4 SyncProviderList

This is a comma separated list of Provider codes. All containers of users that belong to these Providers will be periodically synchronised regardless of the `SyncInboxesOnly` setting.

5.7 Email Settings

5.7.1 EmailOriginHost

Specify the domain of the origin host, for emails sent by the server. See *Enabling Two-Factor Authentication for Administrators* (page 11) for details.

5.7.2 EmailSendTimeout

Timeout in seconds, when sending an email. See *Enabling Two-Factor Authentication for Administrators* (page 11) for details.

5.7.3 EmailReplyToAddress

This is the email address that will appear in the Reply-To header of the email, and will be used by the email client if the user attempts to reply to emails sent by the Web Portal. See *Enabling Two-Factor Authentication for Administrators* (page 11) for details.

5.7.4 EmailSenderAddress

The email address of the sender. This address is not directly visible to the email receiver. If an email bounces, a message will be sent to this address. See *Enabling Two-Factor Authentication for Administrators* (page 11) for details.

5.7.5 EmailSettingsToConfirm

A hash of the email settings that need to be confirmed before saving. See *Enabling Two-Factor Authentication for Administrators* (page 11) for details.

5.7.6 SMTPServerHost

Domain name (and port) of the SMTP server used to send emails. See *Enabling Two-Factor Authentication for Administrators* (page 11) for details.

5.8 General Settings

5.8.1 AllowedProviders

This is a list of Provider codes of the users that may login to the Portal. If set, then this list should match the list of Providers that have been assigned the Web Portal on a Registration Server.

The list of Providers include the owner of the Web Portal service, and all Providers that reference the service by setting the `WEBPORTAL_SERVICE_NAME` Provider setting on the Registration Server.

Note: Changes to the list will not be recognized by running container instances. You have to stop all running instances manually.

5.8.2 ClientSettings

This is a list of settings for the TeamDrive Agent running in all containers belonging to the Web Portal. In addition to these settings, the Web Portal automatically sets `sqlite-synchronous=normal` and `idle-shutdown-timeout` (which depends on the value of `ContainerIdleTimeout`).

The client settings are written to the `teamdrive.ini` file created in the directory specified by `SharedIniPath`.

This means if the client settings are changed, then they only take effect when the TeamDrive Agent is restarted.

5.8.3 MaxLoginLogAge

The Web Portal keeps a log of the logins, which includes the login name, and the IP address of the user. This setting specifies how long the log entries are preserved. By default this is 48 hours.

The purpose of the log is to detect possible abuse or denial of service attacks aimed at the Web Portal.

5.8.4 MaxLoginRate

This is the maximum number of logins to the Web Portal within one minute. The default value is 20. The logins are averaged over 10 minutes so it is possible to exceed this number in bursts.

The object of this setting is to prevent Denial Service and other brute force attacks against the Web Portal login, by automated systems.

As a result, only IP numbers used more than 4 times over the last 10 minutes count towards the total. This means that a login from a little-used IP address is not subject to this restriction.

If the rate is exceeded, the users will get an error message that login has been temporarily disabled for security reasons, and that they should try again in a few minutes.

In addition, an email is sent to the administrators of the Web Portal, specifying the current login rate. This helps administrators to identify attacks on the Web Portal login.

5.8.5 PrimaryRegistrationServer

Web Portals can be connected to a number of Registration Servers. The Primary Registration Server must be selected from the servers that have been registered. This can be done from the Registration Server list.

5.8.6 ServerRoot

The installation directory of the Web Portal application. This setting is read-only, and cannot be changed after installation.

5.8.7 WebPortalDomain

This is the domain name (or URL) of this service.

5.8.8 WebPortalName

This name of this service. The name is displayed in the Web Portal Admin Console. The default value is the domain name of the service. The name is used for display purposes only, and may be set to any value.

5.9 Outgoing Connections

5.9.1 UseProxy

Set this value to `True` in order to enable the use of a proxy for all outgoing connections of the Web Portal and the TeamDrive Agent.

5.9.2 ProxyHost

This is the domain name (or IP address) and port number of the proxy to be used for outgoing connections. If not set, the `UseProxy` setting will be ignored.

Note that this setting is used for both HTTP and HTTPS connections.

5.9.3 NoProxyList

This is a comma separated list of domains and IP addresses that are to be contacted without the use of a proxy.

5.9.4 ConnectionTimeout

The timeout in milliseconds when making outbound connections. The default is 30 seconds.

5.10 Build Image

The Build Image settings are used to build and, if necessary, customize the TeamDrive Agent for use with the Web Portal.

5.10.1 AgentCommandLineArgs

These are the command line arguments passed to the TeamDrive Agent. This is a read-only value that is affected by the following settings: `ContainerIdleTimeout`, `ContainerDatabases` and `SharedIniPath` (see [AgentDownloadURL](#) (page 31), [ContainerDatabases](#) (page 24) and [SharedIniPath](#) (page 26)).

In addition, if `SharedIniPath` is empty, then the value set using `ClientSettings` will be added to the command line parameters.

5.10.2 AgentDownloadURL

This URL is used to download the TeamDrive Agent archive (.tar.gz file).

By default the URL refers to the TeamDrive download portal:

```
http://download.teamdrive.net/{VERSIONSHORT}/{PROVIDERCODE}/linux-x86_64/
↳ {PRODUCTNAME}_agent_{VERSION}_el7.x86_64.tar.gz
```

Before usage, the following substitutions are made:

- **{PRODUCTNAME}** is set to `BuildProductName`, after converting to all lowercase letters.
- **{PROVIDERCODE}** is set to the value of the `BuildProviderCode` setting.
- **{VERSION}** is set to the version of the Agent being built.
- **{VERSIONSHORT}** a short version of the version number of the archive, which does not include the “patch” number. Version numbers have the form: <major>.<minor>.<patch>.<build>

If you have your own download portal, you can remove the placeholders as required.

If the required TeamDrive Agent archive is found in the “archive” folder in the `ServerRoot` directory the Web Portal will not attempt to download the archive.

5.10.3 BuildBinaryName

`BuildBinaryName` is the original name of the TeamDrive Agent executable in the Agent archive (.tar.gz file).

When updating to a new agent version, the binary name is changed to “teamdrived.bin”, which is the name of the executable used by the Web Portal.

5.10.4 BuildProductName

This is the customisable Product name. The default Product name is “teamdrive”.

Note that the Product name is required to be all lowercase letters.

This value is the first part of the name of the Agent archive (.tar.gz file) which contains the binary of the TeamDrive Agent, as specified by the last component of the `AgentDownloadURL` setting, for example: “team-drive_agent_4.5.5.1838_el7.x86_64.tar.gz”.

5.10.5 BuildProviderCode

This is your 4 letter Provider code. This should correspond to the provider code specified in the `DISTRIBUTOR` file. By default, the Provide code is “TMDR”.

5.10.6 DISTRIBUTORFile

This is the contents of the signed DISTRIBUTOR file to be used by the TeamDrive agent running in the container. This value replaces the contents of the DISTRIBUTOR file included in the Agent archive.

By default this value is empty, which means that the DISTRIBUTOR file in the Agent archive is used.

Please notice, that only signed DISTRIBUTOR files will be accepted. The signature will be checked during the start of an agent.

The default contents for the TeamDrive Agent are as follows:

```
code=TMDR
reg-server-list-url=http://reg.teamdrive.net/pbas/td2as/lis/regserverlist.htm
reg-server-name=TeamDriveMaster
reg-server-url=http://reg.teamdrive.net/pbas/td2as/reg/
notification-url=http://notification.teamdrive.net/pbas/td2as/reg/
media-server-url=http://media.teamdrive.net/pbas/td2as/reg/
update-program-url=http://reg.teamdrive.net/pbas/td2as/upd/update.xml
balance-url=http://balance.teamdrive.net/pbas/td2as/bal/balance.xml
log-upload-url=http://logupload.teamdrive.com/upload.php
redirector-url=http://www.teamdrive.com/redirector.php
ping-url=http://ping.teamdrive.net/ping.xml

enable-provider-panel-android=false
enable-provider-panel-ios=false
enable-provider-panel-linux=true
enable-provider-panel-mac=true
enable-provider-panel-win=true
```

5.10.7 HttpConfigFolder

The path to the Apache folder for configuration files, “/etc/httpd/conf.d/” by default.

5.10.8 HttpDocsFolder

This must be set to the path to the Apache documents folder. By default, the value is “/var/www/”.

TROUBLESHOOTING

6.1 List of relevant configuration files

/etc/httpd/conf.d/td-webportal.httpd.conf: The configuration file that loads and enables the TeamDrive Web Portal Server-specific module for the Apache HTTP Server: `mod_yvva.so`.

`mod_yvva.so` is responsible for providing the web-based Host Server Administration Console as well as an API used for authentication.

The file also contains various Apache “rewrite” rules required by the Web Portal.

Note: The rewrite rules in this file are disabled by default. This is because it is assumed that HTTPS is always used to access the Web Portal.

Enable the rewrite rules only if you are certain that HTTP access may be used.

/etc/logrotate.d/td-webportal: This file configures how the log files belonging to the TeamDrive Web Portal are being rotated. See the `logrotate(8)` manual page for details.

/etc/td-webportal.conf: This file defines how the `td-webportal` background service is started using the `yvvad` daemon.

/etc/td-webportal.my.cnf: This configuration file defines the MySQL credentials used to access the `webportal` MySQL database. It is read by the Apache module `mod_yvva` and the `yvvad` daemon that runs the `td-webportal` background tasks and the `yvva` command line client.

/etc/yvva.conf: This configuration file contains configuration settings specific to the Yvva Runtime Environment that effect the `mod_yvva` Apache module and the `yvva` command line shell.

6.2 List of relevant log files

In order to debug and analyse problems with the Web Portal configuration, there are several log files that you should consult:

/var/log/td-webportal.log: The log file for the Yvva runtime which provides the web-based Administration Console, and the Web Portal authentication API. Errors that are incurred by the Web Portal background tasks are also written to this file.

Consult this log file when the Web Portal has issues in contacting the Registration Server, errors when handling API requests or problems with the Administration Console.

You can increase the amount of logging by changing the Yvva setting `log-level` from `notice` to `trace` or `debug` in the `yvva.conf` file:

```
log-level=trace
```

After changing `yvva.conf` you need to restart the Apache HTTP Server service using `service httpd restart`.

This log file is also used by the `td-webportal` background service. Check the log file to verify that background tasks are being processed without errors.

The log file location can be configured by changing the file name passed to the `log-file` option in the configuration file `/etc/td-webportal.conf`. The log level can be increased by changing the default value `notice` for the `log-level` option to `trace` or `debug`.

Changing these values requires a restart of the `td-webportal` background process using `service td-webportal restart`.

/var/log/httpd/: The Apache HTTP Server's log files (e.g. `error_log`) might also contain additional relevant error messages that should be checked.

6.3 Enable Logging with Syslog

As outlined in list of relevant log files, the TeamDrive Web Portal logs critical errors and other notable events in a log file by default.

It is now possible to redirect the log output of the Yvva runtime components to a local `syslog` instance instead.

Syslog support is an essential feature for auditing, security and/or compliance reasons, as it allows you to funnel all log messages into a centralized syslog server.

This makes it easier to monitor the logs for critical events or errors and prevents tampering with the log files in case of a security breach. It also helps to maintain control over the disk space utilization on the server, as growing log files can't accidentally fill up the file system.

To enable syslog support, the log file name in the `log-file` setting has to be replaced with the keyword `syslog`. Optionally, a custom process identifier can be supplied, by appending it to the `syslog` keyword, using a colon as the separator, e.g. `log-file=syslog:my_process_identifier`. If not used, the default process identifier will be used, which is the name of the Yvva component.

To enable syslog support for the Yvva-based `td-webportal` background service, edit the `log-file` setting in file `/etc/td-webportal.conf` as follows:

```
log-file=syslog:webp-bkgr
```

You need to restart the `td-webportal` background service via `service td-webportal restart` in order to activate this change. If the `log-level` is set to `debug` you will now see log messages appearing in `/var/log/messages`:

```
Jun 23 11:57:33 localhost webp-bkgr: notice: yvvad startup
Jun 23 11:57:33 localhost webp-bkgr: notice: Using config file:
/etc/td-webportal.conf
Jun 23 11:57:33 localhost webp-bkgr: notice: No listen port
Jun 23 11:57:33 localhost webp-bkgr: notice: yvvad running in repeat 60
(seconds) mode
```

To enable syslog support for the Web Portal API and Administration Console, edit the `/etc/yvva.conf` file as follows:

```
log-file=syslog:webp-httpd
```

You need to restart the Apache HTTP Server via `service httpd restart` in order to activate this change. If the `log-level` is set to `debug` you will now see log messages appearing in `/var/log/messages`:

```
Jun 23 12:06:04 localhost webp-httpd: notice: mod_yvva 1.2.1 (May 21 2015
11:00:12) startup OK
```


6.4 Common errors

6.4.1 Web Installation: “500 Internal Server Error”

This error can be triggered by several error conditions. Check the log file `/var/log/td-webportal.log` for details.

Some common errors include:

```
[Error] -12036 (2002): Can't connect to local MySQL server through socket
'/var/lib/mysql/mysql.sock' (25)
[Error] "startup.yv" (80)
```

The local MySQL Server's socket file can't be opened. This could either be a permission problem, or the MySQL Server is simply not available. Check that MySQL is actually up and running (e.g. by running `service mysqld status`) and restart it, if necessary. If the error persists, check the MySQL error log file (usually `/var/log/mysqld.log`) for hints.

Similarly, an error like the following one indicates that a remote MySQL Server might not be answering (e.g. because of a firewall rule or because it's not running):

```
[Error] -12036 (2003): Can't connect to MySQL server on
'webportal.yourdomain.com' (107)
[Error] "startup.yv" (80)
```

If you see Access denied errors like the following one:

```
[Error] -12036 (1045): Access denied for user 'teamdrive'@'localhost' (using
password: YES)
[Error] "startup.yv" (32)
```

Either the username or password used to connect to the MySQL Server are wrong. Double check that the MySQL username and password provided in `/etc/td-webportal.mysql.cnf` are correct, e.g. by trying to connect to the MySQL server using these credentials with the `mysql` command line client.

If you see the following error when connecting to a remote MySQL Server:

```
[Error] -12036 (1130): Host 'webportal.yourdomain.com' is not allowed to
connect to this MySQL server
[Error] "startup.yv" (80)
```

Check the TeamDrive MySQL user's privileges on the remote MySQL server, e.g. by running `SHOW GRANTS FOR 'teamdrive'@'webportal.yourdomain.com';` and make sure that this user is allowed to connect to the MySQL server from the Registration Server's host.

6.4.2 Errors When Accessing the Registration Server

If the Web Portal fails to contact the Registration Server, check the `/var/log/td-webportal.log` log file, as well as `/var/log/td-regserver.log` on the Registration Server for hints.

See the Troubleshooting chapter in the Registration Server Installation Manual for details.

Note: Note that Registration Server version 3.5 or later is required by the Web Portal.

RELEASE NOTES - VERSION 5.0

7.1 5.0.0 (2024-08-09)

- First release for CentOS 9. Version number 5 for all server products (TeamDrive Registration Server, TeamDrive Host Server and TeamDrive Web Portal) only stands for the common CentOS 9 release. The actual functionality of the Web Portal is based on the last release 3.1.3 and only includes small changes (see below) and the current client version (see below).
- HMAC-SHA1 authentication can now be selected for accessing the Registration Server API (WEBCLIENT-463).
- When using External Authentication there some cases where the login name (usually an email address) that was entered in TeamDrive was not always pre-filled in the External Authentication login page. In addition, if the login name is not an email address, then the field will not be set to read-only.
- If `AllowedProviders` is not set then the redirect to the appropriate Web Portal of the user was not always working correctly (WEBCLIENT-465).
- Set client version to 5.2.0.3615
- Admin Console: Added a “Restart” button to the details page (WEBCLIENT-469).

RELEASE NOTES - VERSION 3.1

8.1 3.1.3 (2023-11-13)

- External authentication now redirects to “/external-authentication/finish”. This fixes the issue with Web Portal external authentication and 2-Factor authentication.
- Set client version to 5.0.8.3464

8.2 3.1.2 (2023-07-18)

- Set client version to 5.0.6.3386
- The `UseEmbeddedLogin` setting has been removed. This means there is no longer an option to embedded in the TeamDrive Agent GUI (WEBCLIENT-459). This is because most external authentication services do not support embedding in a iFrame for security reasons (for example Microsoft Azure).
- Fixed an update problem (from 3.1.1) which concerned the Container Log table (WEBCLIENT-460).

8.3 3.1.1 (2023-05-23)

- Set client version to 5.0.2.3338
- Added `SyncProviderList` setting (WEBCLIENT-456). This is a comma separated list of Provider codes. All containers of users that belong to these Providers will be periodically synchronised regardless of the `SyncInboxesOnly` setting.
- The Web Portal now writes a “Container Log” which traces the main events and activity regarding a container (WEBCLIENT-457). This includes:
 - `START WEBUI/INBOX` - The container was started because a user logged in.
 - `SYNC WEBUI/INBOX` - The container was started by the auto-sync background task.
 - `STOPPED WEBUI/INBOX` - The container has stopped. Note this log entry is only created when the Web Portal becomes aware that a container is no longer running so this may not be the actual shutdown time.
 - `DELETE FINAL` - The container was completely removed, including all local storage and backups.
 - `SHUTDOWN WEBUI/INBOX` - The container was stopped.
 - `DELETE LOCAL` - The container’s local storage was deleted.
 - `ERROR WEBUI/INBOX` - An error occurred when starting the container.
 - `CREATE WEBUI/INBOX` - A new container was created for an inbox or a user that logged in for the first time.
 - `CREATE BACKUP` - The container database and settings have been copied to the Cloud Storage.

- RESTORE BACKUP - The container database and settings have been restored from Cloud Storage.
- REMOVE BACKUP - The Cloud Storage backup of the container has been removed.
- ERROR RESTORE - An error occurred while restoring the container from Cloud Storage.
- Fixed a problem with the flag that indicates that the local databases exists. This can effect the auto-sync function which starts a container regularly so that changes to spaces are applied even if the user does not login.
- Fixed upgrade of the WP_Container table which fails with the error: Invalid default value for 'ActiveTime'.

8.4 3.1.0 (2022-10-25)

- Set client version to 4.8.0.3249
- The setting `BuildBinaryName` is now read-only and is set to the name of the Agent binary executable from the Agent archive on upgrade. The binary is then renamed to “teamdrived.bin” which is the fixed name now used by the Web Portal (WEBCLIENT-451).
- The Web Portal will now periodically start containers so that the TeamDrive Agent can sync any changes that may have occurred in space (WEBCLIENT-454).

A new auto-task, **Synchronise Containers**, was created to perform this operation.

The settings: `ContainerRunLimit`, `EnableSyncContainers` and `SyncInboxesOnly`, have been added to control the behaviour of the task.

See *Container Syncing* (page 27) for more details..

- Addition template variables for `SandboxCommand`:
 - {RLE=T} Set to non-zero value if the option “require-local-encryption=true” should be set when starting the agent.
 - {IST=N} Set to non-zero if the option “idle-shutdown-timeout” should be set to the given value.
 - {ESE=F} Set to non-zero if the option “enable-shell-extension=false” should be set.
- Prevent the pre-5.0 TeamDrive Agent from starting the shell extension (WEBCLIENT-453).
- If the Web Portal cannot reach the Agent (HTTP connection failed), it will terminate the process (if it is running) and return a session timeout error to the Web GUI (WEBCLIENT-450).
- Hardening sets `UMASK` to 077 which requires group privileges to be fixed when the TeamDrive Agent package is unzipped (WEBCLIENT-452).
- Login on the Web Portal no longer returns the “Unknown user” error (WEBCLIENT-438). Instead, it will return an error of the form: “Username or password incorrect”, when the user enters their password.
- The Admin Console now displays the Auto Task list (WEBCLIENT-434).
- The `mod_agent.log` can now be viewed in the Admin Console.
- Added a new Sandbox setting: `RequireLocalEncryption`, which allows you to ensure that all containers of the Web Portal use local encryption (WEBCLIENT-399).
- When `UseEmbeddedLogin` is set to `True`, the “embedded” option is no longer set for the `RegistrationURL` link (WEBCLIENT-379). This is because the Web Portal always redirects to this page, and does not embed the page in the Web user interface.
- Improvement to Web Portal redirection:

The Web Portal will display an information message when the user has been redirected from another Web Portal.

After a redirect has occurred, the login name (username or email) entered by the user will preserved and display in the appropriate field (WEBCLIENT-363).

If the login email contains a registered domain, then the Web Portal will redirect to the Web Portal belonging to the Provider of the domain, even if the user is not yet a registered user (WEBCLIENT-375).

When multiple Web Portals are used by the same Registration Server, the user will now be redirected to their Provider associated Web Portal, when attempting to login to the incorrect Web Portal. Previously users were only redirected when the required Web Portal was associated with a different Registration Server.

NOTE: The Web Portal associated with Provider is specified by the `WEBPORTAL_API_URL` Provider setting. This value must be set if redirection is required.

RELEASE NOTES - VERSION 3.0

9.1 3.0.4 (2022-09-21)

- Set client version to 4.8.0.3223

9.2 3.0.3 (2022-06-15)

- Set client version to 4.7.5.3196

9.3 3.0.2 (2022-01-10)

This release also includes a number of security improvements. Please follow the instructions in *Upgrading from a Docker based to a Docker less Web Portal* (page 15) to upgrade an existing Web Portal to a docker-less version. Please contact TeamDrive for further details.

- For security reasons, Docker has been replaced by customised TeamDrive Agent containerisation (WEBCLIENT-430).

The settings ImageBuildFolder, MinDockerDataSpaceAvailable, MinDockerMetaDataSpaceAvailable, RootlessDocker, BuildDockerfile, ImageBuildCommand, DockerEntryPoint, BuildWgetCommand, ContainerHosts, ContainerUserID, ContainerGroupID, RunAsUser, RunAsGroup and UseSudo are no longer used and have been removed.

Renamed DockerHost setting to ContainerHost.

- Added a new apache module: mod_agent which is now responsible for routing calls from the browser to the respective TeamDrive Agent.
- Added the SandboxCommand setting which specifies the command for the TeamDrive Agent sandbox. If empty, then the agent is not run in a sandbox.

The following template variables may be used in the setting:

- {TDBIN} TeamDrive Agent binary, this value should be: “/var/teamdrive/webportal/agent/teamdrived.bin”
- {APIPORT} API port number
- {WSPORT} Websocket port
- {USERNAME} The username of the TeamDrive user
- {ROOTPATH} TeamDrive root path, this value should be “/teamdrive/” the Agent directories used on this path are “{ROOTPATH}{USERNAME}/system” and “{ROOTPATH}{USERNAME}/spaces”

- {DBSPATH} The alternative database path, which is used to store the SQLite database files. If there is no alternative path then {DBSPATH} == {ROOTPATH}. The actual directory used by the agent is: “{ROOTPATH}{USERNAME}/system”
- {INIPATH} The shared directory which contains the “teamdrive.ini” file.

9.4 3.0.1 (2021-10-11)

This is a security update.

- A number of security issue have been fixed, please contact TeamDrive for further details.
- yvva 1.5.11 is required which includes measures to prevent “Log Poisoning” by encoding r and n characters (YVVA-52).
- Fixed container creation error after user was deleted and recreated (WEBCLIENT-418 and WEBCLIENT-419).

9.5 3.0.0 (2021-08-20)

The 3.0 release includes a several security bug fixes and a number of hardening measures, and is recommended to all users.

Please contact TeamDrive for further details.

Version 3.0 is an in-place upgrade to all previous versions running on CentOS 7.

On CentOS 8 the new version runs with Docker in “rootless mode”, see:

<https://docs.docker.com/engine/security/rootless/>

Because of the added security due to rootless mode, and other CentOS 8 security updates, all users of the Web Portal are requested to transition to this version as soon as possible.

- Initial public release of 3.0.
- Set security headers in Apache configuration (WEBCLIENT-400).
- OS hardening and security update to Apache configuration (WEBCLIENT-385).
- Hardening of TeamDrive Agent (Agent Version >= 4.7.1.3011).
- Support for running Docker in rootless mode (only CentOS 8)

RELEASE NOTES - VERSION 2.0

10.1 2.0.8 (2020-05-10)

- Fixed an access denied error when calling the Registration Server API to get information on a user that belongs to a another provider (i.e. a provider other than the Web Portal's provider).
- Fixed handling of email address change due to user deletion or if two users switch email addresses (WEBCLIENT-372).
- Added support for MySQL 8
- Set client version to 4.7.0.2944

10.2 2.0.7 (2020-12-16)

- If a user logs in with an email address that is not unique, the Web Portal will return an appropriate error (WEBCLIENT-358).
- Login with email will now re-direct to the correct Web Portal if necessary, provider Registration Server version 4.5.4 or later and TDNS version 2.0.2 is use (WEBCLIENT-357).
- Set client version to 4.6.12.2793

10.3 2.0.6 (2020-10-02)

- Login with a temporary password was not working when using an email address (WEBCLIENT-356).
- Fixed bug: the Web GUI not going directly to the external authentication login page when `AuthServiceEnabled` was set to `True` (WEBCLIENT-355).
- Entries separated by a newline in the `ContainerHosts` setting was not working correctly (WEBCLIENT-354).
- Fixed "Array index out of bounds" error when accessing the "Build Image" settings details page.

10.4 2.0.5 (2020-09-15)

- The "White Label" settings have been renamed to "Build Image" settings. In addition, the setting `UseWhiteLabeldDockerImage` has been removed and the `WhiteLabelINIFileSettings` setting has been rename to `ClientSettings` (see below).

`UseWhiteLabeldDockerImage` is no longer required because all Web Portals now use the image build settings to create a new Docker image on upgrade, if necessary.

The setting `WhiteLabelIdleTimeout` has been renamed to `ContainerIdleTimeout` and is now a “Docker Setting” (see [ContainerIdleTimeout](#) (page 24)).

The `IdleContainerTimeout` setting has been renamed to `RemoveIdleContainerTime` to better distinguish this value from `ContainerIdleTimeout`.

- Added `SharedIniPath` and `AgentCommandLineArgs`. Using `SharedIniPath` you can specify a global path for the “teamdrive.ini” file (WEBCLIENT-350).

`WhiteLabelINIFileSettings` has been renamed to `ClientSettings` and is now a “General Setting”. Client settings that are set using the `ClientSettings` setting are then written to the `teamdrive.ini` file. If a `SharedIniPath` is specified, then they are read by the all TeamDrive agents, when a container starts. If not, then the client settings are written to the `/etc/teamdrive.ini` file, which is part of the container image.

The `AgentCommandLineArgs` settings is a read-only variable that specifies the command line arguments that are passed to the TeamDrive agent when the container starts.

See [SharedIniPath](#) (page 26), [AgentCommandLineArgs](#) (page 31) and [ClientSettings](#) (page 29) for details.

- Added `MaxLoginRate` and `MaxLoginLogAge` settings. These settings are used to detect Denial of Service and other brute force attacks targeting the Web Portal login (WEBCLIENT-344). See [MaxLoginRate](#) (page 29) and [MaxLoginLogAge](#) (page 29) for details.
- Error messages returned by the Web Portal are now use the translation file provided by the TeamDrive Agent.
- Added `ContainerHosts` setting (see `containerhosts`). Use this to specify entries for the “/etc/hosts” file of the container (WEBCLIENT-139).
- You can now configure a proxy during setup of the Web Portal (WEBCLIENT-338).
- If `AuthServiceEnabled` is `False` the Web Portal now uses external authentication as required by the user, provided you are using TeamDrive Agent 4.6.11.2656 or later (WEBCLIENT-335).

As before, if `AuthServiceEnabled` is `True`, then Web Portal uses a specific authentication service (as specified by `AuthLoginPageURL` and `AuthTokenVerifyURL`).

See [AuthServiceEnabled](#) (page 22) for more details.

- Moved settings `SessionTimeout`, `ForceHTTPSUsage` and `ForceHTTPSUsage` to Admin Console settings group.
- Moved `RegistrationEnabled` and `RegistrationURL` to the Authentication settings group.
- The Web Portal will now redirect to another Web Portal, if a user attempts to login to the incorrect Web Portal (WEBCLIENT-333). This is done if the provider of the user is not in the list of `AllowedProviders`.

On the Registration Server of the user, you must set the `WEBPORTAL_API_URL` provider setting. This setting specifies the domain name of the Web Portal used by the provider. In addition, Registration Server version 4.5.4 is required. This version implements the “webportal” redirect required to implement this functionality.

If any of these conditions is not met, then the user will get the error message: “The provider you are registered to is not enabled for this web portal”.

- Set the minimum client Agent version to 4.6.11.2707. This version support the Web Portal redirect, and includes some error message improvements.
- Setting the default distributor code, and language using the `portal/login.html` and `extauth/login.html` pages is not longer supported.

10.5 2.0.4 (2020-05-19)

- Added Multi-Registration Server support.

- Fixed agent download URL.
- All documents and security relevant data stored in containers run by the web portal are now encrypted when using TeamDrive Agent version 4.7 or later.

Encryption activates the so-called “super PIN” functionality implemented by Registration Server 4.2. When the super PIN is activated for an account the user is required to print out and save a 56-digit super PIN, and recovery URL (in the form of QR code) in a secure place.

After activation of the super PIN functionality the user can only access their account using their password, or the super PIN, or the recovery code (which can be retrieved using the recovery URL). Changing your password is also only possible using either the super PIN or recovery code.

- Changes made to support local encryption of inboxes. Encryption of inboxes required Registration Server version 4.2 or later, and TeamDrive Agent version 4.7 or later.
- Added `ContainerDatabases` setting (WEBCLIENT-334). This setting allows you to specify an alternative path for the SQLite databases used by the containers. Normally all data is placed in the `ContainerRoot` directory.

When specified the new location will be mounted in the container under the path: `/teamdrive/dbs`. However, this path will only be used if you build a new image using the TeamDrive Agent version 4.6.12.2637 or later.

This version of the client supports the `--database-path` option which allows you to specify an alternative path for the SQLite database. When `ContainerDatabases` is set, the image build process will automatically add this option to the start parameters of the agent (see `@USEDATABASEPATH` in the `WhiteLabelDockerfile` setting).

10.6 2.0.3 (2020-04-14)

- Changes for yvva 1.5.2 compatibility.
- Fixed a problem removing container data, remove directory was failing when a ‘\$’ was in the path name.
- The Web Portal will now correctly use the database specified in the `“td-webportal.my.cnf”` file (WEBCLIENT-296). Previously the database name was hard-coded to `“webportal”`.
- Fixed: in case of an exception the temporary file created by `syscall()` is not be deleted (WEBCLIENT-316).
- Fixed: HTML entities conversion problem when editing setting `“WhiteLabelDockerfile”` (WEBCLIENT-323).
- When the docker image is being updated, the Web GUI will now return the error `“Upgrade in progress, please try again shortly”`, when the user attempts to login.
- Added API functions to enable and disabled a container (WEBCLIENT-324).
- Added support for `“prelogin”` call in order to support login changes (WEBCLIENT-327).
- Added `“sqlite-synchronous=normal”` as start parameter for the agents to reduce SQLite flush frequency
- Set client version to 4.6.10.2619

10.7 2.0.2 (2019-07-26)

- Increased `MinimumAgentVersion` to 4.6.7.2355.

10.8 2.0.1 (2019-06-11)

- Fixed problems the on demand creation and starting of containers that have been deleted (WEBCLIENT-304).

10.9 2.0.0 (2019-04-25)

Note: Please follow the new update process described in chapter `upgrade_web_portal`. The former separate GUI rpm package is not longer necessary. The standard Web Portal will update the docker Container image from the docker hub during the update step and will extract and update the files necessary for the GUI from this image. A white label Web Portal needs the white label agent .tar.gz to build a white label docker container image.

- Initial release of Web Portal 2.0.

10.9.1 Upgrading from previous versions of the Web Portal

As of version 2.0.4 you must run the `upgrade_now` command from the console after installing a new version of the Web Portal.

This command updates the database structure and the docker image used by the Web Portal. The Admin Console may return errors, and other random errors may occur before the upgrade had been completed.

To update the database structure and docker image start `yvva` and execute `upgrade_now;;`. This command also upgrade the container image used by the Web Portal. See the chapter `upgrade_web_portal` for details.

10.9.2 Key features and changes

- Increased `MinimumAgentVersion` to 4.6.7.2328
- External authentication supports both login and registration. This feature can be activated by setting `AuthServiceEnabled` to `True`. To allow registration set `RegistrationEnabled` to `True`. If no `AuthLoginPageURL` or `RegistrationURL` page is specified then the Web Portal will use the “portal pages”, provided by the Registration Server.
- External authentication can be embedded in the TeamDrive Web GUI, or can the external authentication pages can be used directly. A new setting: `UseEmbeddedLogin`, must be set to `True` in order to use the embedded login form.

By default, `UseEmbeddedLogin` is set to `False` if you upgrade from a previous version of the Web Portal that was using external authentication. Otherwise, the default is `True`. This is to ensure backwards compatibility, with previous versions that only supported the non-embedded form.

Accessing the Web Portal domain, for example: `https://webportal.yourdomain.com`, will automatically present the login in the embedded or non-embedded form, as specified by `UseEmbeddedLogin`.

- You can now use “explicit” links to the login page in order to set the default provider code and language, for the login or registration.

For the non-embedded login form use the following explicit link:

`https://webportal.yourdomain.com/portal/login.html?dist=CODE&lang=LG`

and for the embedded login form use the following explicit link:

`https://webportal.yourdomain.com/extauth/login.html?dist=CODE&lang=LG`

where `CODE` is the provider code, and `LG` is the language code, for example `en` or `de`.

Note that the external authentication service must be able to handle the specified provider code and language.

10.9.3 Administration Console

- Added a Container list page, which can be used to search for containers of a particular user and type. The container details page allows you to stop, start and delete containers.

Note that deleting a container will remove all the container data as well. This means that Web Portal users will find all spaces deactivated on next login. If the user loses his password he will also lose access to his data, unless he has a TeamDrive installation elsewhere.

RELEASE NOTES - VERSION 1.2

11.1 1.2.3 (2019-01-15)

- Reset of Admin User's password as described in the documentation (i.e. by setting the password to blank in the database) was not working (WEBCLIENT-259).
- Added a illustrated overview of the Web Portal to the documentation, showing the connection to other components in the TeamDrive system (see `introduction_to_the_teamdrive_web_portal`).

11.2 1.2.2 (2018-11-06)

- The Web Portal supports now the Docker Community and Enterprise Edition and also still the old Commercially Supported version with the latest version 1.13 (from January 2017). Please notice, that the Docker CS version will be still maintained, but not further developed any more. Check the docker installation chapter for the differences between Docker CS and CE/EE installation.
- The Web Portal will only allow using signed DISTRIBUTOR files like the standard client. The signature will be checked during the creation of the docker image and at each start of the agent. Additional client settings must be moved to the new setting `WhiteLabelINIFileSettings`. If settings are still required in the DISTRIBUTOR file it must be signed by TeamDrive Systems for you.
- The current agent supports now web-sockets to refresh data in the browser without refreshing the page itself. To support web-socket connections, the apache module `proxy_wstunnel_module` must be enabled (See `configure-apache-24` for details)
- Increased `MinimumAgentVersion` to 4.6.4.2183

11.3 1.2.1 (2017-11-29)

- Increased `MinimumAgentVersion` to 4.5.5.1838
- Upgrade will change the `WhiteLabelAgentDownloadURL` setting from `".../{PRODUCTNAME}_agent_{VERSION}_x86_64.tar.gz"` to `".../{PRODUCTNAME}_agent_{VERSION}_el7.x86_64.tar.gz"`. this is done because the TeamDrive agent is now built in 2 versions: "el6" are built for CentOS 6, and "el7" versions are built for CentOS 7. It is assumed that the Web Portal is run on a CentOS 7 platform. If this is not the case, then you must manually change this setting to `".../{PRODUCTNAME}_agent_{VERSION}_el6.x86_64.tar.gz"` (WEBCLIENT-255).
- Updated documentation to include new TeamDrive CI (WEBCLIENT-254).
- The Web Portal external authentication now handles transitioning to a new User Secret generation algorithm as implemented by Registration Server version 3.7.6.
- Bug fix: boolean settings were not correctly pre-selected.

- Several improvements have been made to the upgrade procedure which generates a new Docker image. The setting `WhiteLabelAgentDownloadURL` can now be left blank, of the Agent archive (.tar.gz file) has been placed manually in the build folder (`WhiteLabelDockerBuildFolder`).
- If `ContainerImage` is set to image with a version number higher than the `MinimumAgentVersion`, then the Web Portal will build an image for the version specified by `ContainerImage`.
- Version 1.2.1 requires YVVA runtime version 1.4.4.

11.4 1.2.0 (2017-08-14)

Note: Please follow the new update process described in chapter `upgrade_web_portal`. The former separate GUI rpm package is not longer necessary. The standard Web Portal will update the docker Container image from the docker hub during the update step and will extract and update the files necessary for the GUI from this image. A white label Web Portal needs the white label agent .tar.gz to build a white label docker container image.

- Initial 1.2 release.

11.4.1 Key features and changes

- Simplified installing and updating the web portal and docker container for standard and white label configuration.
- Increased `MinimumAgentVersion` to 4.5.2.1775 to support PointInTime-Recovery and Read-Confirmations

RELEASE NOTES - VERSION 1.1

12.1 1.1.0 (2017-04-10)

Note: When updating from an older version of the Web Portal, remove the `DOCKER_HOST` setting in the apache config file `/etc/sysconfig/httpd`. It is not longer necessary.

If you update docker to version 1.12.6 the docker service might not start anymore as described in the docker release notes: <https://github.com/docker/docker/releases/tag/v1.12.6> Please remove the file `/etc/systemd/system/docker.service.d/web-portal.conf` and add the `--host=tcp://0.0.0.0:2375` instead to the `OPTIONS` parameters in `/etc/sysconfig/docker` as described in the docker configuration chapter.

- Initial 1.1 release.

12.1.1 Key features and changes

- Added professional license required check (WEBCLIENT-233)
- Added setting to limit currently active users (WEBCLIENT-234)
- Added setting for minimum docker available data and meta data space. If minimum is reached, no more docker container will be created for new users (WEBCLIENT-235)
- Settings are now displayed in groups in the Admin Console (WEBCLIENT-237).
- Increased `MinimumAgentVersion` to 4.3.2.1681 to support space web access settings (TDCLIENT-2184). The webportal docker agent will be started with an additional setting `agent-type=webportal` to distinguish a standard and a webportal agent
- Added settings to support a Proxy for outgoing connections: `UseProxy`, `ProxyHost` and `NoProxyList` (WEBCLIENT-242). See *Outgoing Connections* (page 30) for details.
- Added the `ConnectionTimeout` setting which specifies a timeout for outgoing connections (see *Outgoing Connections* (page 30)).
- Added support for Docker Swarm. Docker Swarm is a native clustering for Docker. It turns a pool of Docker hosts into a single, virtual Docker host. Please notice, that only the legacy standalone Swarm is supported (<https://docs.docker.com/swarm/overview/>), because of the different service model in the Docker Engine v1.12.0 using the swarm mode. Change the `DockerHost` Web Portal setting from the standard docker port 2375 to the swarm port 2377 to switch from the standard docker API access to the swarm API access (WEBCLIENT-245).

RELEASE NOTES - VERSION 1.0

13.1 1.0.9 (2017-02-10)

- Increased MinimumAgentVersion to 4.3.1.1656 to fix a bug when login with email address and magic usernames.
- Revised chapter Web Portal Virtual Appliance with CentOS 7 and docker direct-lvm storage

13.2 1.0.8 (2017-02-07)

Note: After updating docker to version 1.12.6 the docker service might not start anymore as described in the docker release notes: <https://github.com/docker/docker/releases/tag/v1.12.6> Please remove the file `/etc/systemd/system/docker.service.d/web-portal.conf` and add the `--host=tcp://0.0.0.0:2375` instead to the `OPTIONS` parameters in `/etc/sysconfig/docker` as described in the docker configuration chapter.

- Removed support for CentOS 6
- Fixed docker configuration
- Fixed PDF creation for this documentation
- Fixed download links for VM-Ware images

13.3 1.0.7 (2016-11-10)

- Increased MinimumAgentVersion to 4.2.2.1579 to support email notifications
- Fixed docker configuration
- Fixed apache 2.4 configuration

13.4 1.0.6 (2016-07-11)

Note: Updating the Host Server on CentOS 7 with “yum update” might update the apache to a newer version. This update could re-install the deleted “conf”-files in the folder `/etc/httpd/conf.modules.d/` and will prevent starting the apache. Please follow the modified instruction to disable all modules in the “conf”-files instead of deleting them as described in `configure-apache-24`

- Improved Docker installation documentation (WEBCLIENT-219, WEBCLIENT-223).

- The Web Portal now checks if the user is authorised to access a Web Portal. A user is authorised to access a Web Portal if the Provider setting: `ALLOW_WEB_PORTAL_ACCESS` is set to `permit` or `ALLOW_WEB_PORTAL_ACCESS` is set to `peruser` and the user's "Web Portal Access" capability bit is set (a user-level setting).

When using external authentication, the same check is done if the Registration Server is version 3.6 or later. When using a Registration Server 3.5 or earlier, the Web Portal will not check the user's Web Portal access permissions (in the case of external authentication).

- Added setting `AllowedProviders` which is a list of Provider codes of the users that are allowed to login to the Web Portal.

An input field on the setup page allows this variable to be set during installation of the Web Portal.

- The URL `https://webportal.yourdomain.com/portal/authservice.html` is now the target URL for external Authentication Services acting on behalf of the Web Portal.

In other words, in successful authorisation by an external Authentication Service, the user is redirected back to this page.

The Web Portal will now add certain arguments to `AuthLoginPageURL` and `RegisterURL` pages:

- “portal=true”: This argument is always added to the URL. This is useful, in the case when the same Authentication Service is called by the TeamDrive Client and the Web Portal. The argument can be used to determine whether to redirect on successful login or not.
 - “cookie=?”: This argument will be added if the Authentication Service provided a cookie after the last successful login. The cookie is stored by the TeamDrive Agent.
 - “error=?”: This argument indicates that the Web Portal encountered an error after successful authorisation by the Authentication Service. It is a base-64 (URL) encoded string containing the error message. The error should be displayed in the login page served by the Authentication Service.
- Support CentOS 7 with Apache 2.4
 - Increased `MinimumAgentVersion` to 4.2.0.1470 to support the space activities
 - Added setting `RegistrationEnabled` (default `False`). This value must be set to `True` to allow registration of users directly via the Web Portal.
 - Added login and registration pages: All of these pages redirect to the associated pages on the Registration Server. After login, or registration, the Registration Server redirects back to the Web Portal.
 - `https://webportal.yourdomain.com/portal/login.html` This page allows users to login using two-factor authentication, if this has been configured. `/portal/login.html` is now the default for the `AuthLoginPageURL` setting.
 - `https://webportal.yourdomain.com/portal/register.html` Using this page a user can register as a TeamDrive user without installing the TeamDrive Client. After registration the user has access to the Web Portal. `/portal/register.html` is now the default for the `RegisterURL` setting.
 - `https://webportal.yourdomain.com/portal/lost_pwd.html` This page sends a temporary password to the user and allows the user to login and set a new password. The page is linked from `/portal/login.html`.
 - `https://webportal.yourdomain.com/portal/setup-2fa.html` Using this page the user can configure two-factor authentication using the Google Authenticator App.
 - The default of the “`AuthTokenVerifyURL`” setting is now: `https://webportal.yourdomain.com/portal/verify.html`

13.5 1.0.5 (2016-02-16)

- Fixed a problem on login with a user registered via the Registration Server API using email address as identification (WEBCLIENT-205).

- Use the -v option when removing containers. This ensures that the container volume is also removed (WEBCLIENT-204).

13.6 1.0.4 (2016-02-09)

- Framework synced with Host- and Reg-Server

13.7 1.0.3 (2016-02-02)

- Added setting `MinimumAgentVersion` which specifies the minimum version of the TeamDrive Agent that will work with the Web Portal. Upgrade to this version of the Agent is forced as soon as the new version of the Web Portal is online (WEBCLIENT-194).
- Updated documentation for Docker version 1.7.1
- Fixed Internet explorer caches API calls. (WEBCLIENT-186)
- Added description about the dependencies between Webportal, Provider and Reg-Server and normal and external Authentication. (WEBCLIENT-176)
- The `performExternalAuthentication` redirects to <http://> instead of <https://>. (WEBCLIENT-182)
- The `getLoginInformation()` API call now returns “registerUrl” if the setting `RegistrationURL`, is set on the Web Portal. (WEBCLIENT-179)
- Redirect to the login page when a request to an agent returns a 503 code. This requires a manual update to the `ssl.conf`, refer to the documentation on server installation and configuration. (WEBCLIENT-198)

13.8 1.0.2 (2015-12-07)

- Fixed container language settings so that Spaces with non-ascii characters in the name now work.
- Corrected redirect to external login pages under certain circumstances.
- Login with an email address now works.
- The Portal no longer creates containers based on the case of the input username, instead the actual username is used. This prevents the creation of duplicate containers for the same user.
- The Web Portal session will now timeout after 15 minutes idle time. The user is then required to login again.
- Implemented reset password functionality. Login after password has been forgotten now works. The user will receive a temporary password via email which is used to set a new password and login.
- Note, new re-write must be added to `/etc/httpd/conf.d/ssl.conf`:

```
RewriteRule ^/requestResetPassword /yvva/requestResetPassword [PT]
RewriteRule ^/tempPasswordLogin /yvva/tempPasswordLogin [PT]
```

- Fixed loading of favicon

13.9 1.0.1 (2015-10-27)

- `OldImageRemovalTime` setting was not visible.
- Updated Web Portal GUI to the latest 4.1.x version from the webfrontend branch.

13.10 1.0.0 (2015-10-08)

- Initial public release of the Web Portal.
- Web Portal 1.0 requires TeamDrive Agent version 4.0.12.1292 or later.

14.1 Abbreviations

PBT PBT is an object oriented language specifically designed for the programming of “server-side” functionality common to intra- and internet Web sites. A large share of the TeamDrive Host, Registration Server and Webportal Server functionality is implemented in PBT. The code is parsed and executed by the Yvva application server components.

TDNS Team Drive Name Service

TDRS Team Drive Registration Server

TSHS Team Drive Scalable Host Storage.