Set up a single-server test environment

Who is this article for?

√ Ø Code42 for Enterprise
See product plans and features (https://support.code42.com/Terms_and_conditions/Code42_customer_support_resources/Code42_product_plans)

√ Ø CrashPlan for Small Business
CrashPlan for Small Business, no.
Code42 for Enterprise, yes.
Link: Product plans and features.
This article applies to versions 6 and 7.

Overview

This tutorial explains how to set up a test Code42 environment that simulates a single-server production Code42 environment. You can use the test environment to test upgrades and features without affecting your production environment.

If your production environment includes:

• One or more Code42 storage servers, see Setting Up A Multi-Server Test Environment (https://support.code42.com/Administrator/6/Planning_and_installing/Set_up_a_multi-server_test_environment).
• Multiple Code42 authority servers, contact your Customer Success Manager (CSM) to engage the Code42 Professional Services team.

Definitions

Code42 environment

A broad term for all parts of a Code42 for Enterprise installation, which might include an authority server, storage servers, the administration console, organizations, users, and devices.
Example: "Go to Settings > Security > LDAP to enable LDAP integration for your Code42 environment."

**host server**
A physical or virtual machine that hosts a Code42 server.

**production environment**
The environment that supports the day-to-day operations of your business.

**test environment**
An environment dedicated to testing and separated from your production environment.

**Before you begin**

- Contact your [Customer Success Manager (CSM)](mailto:csmsupport@code42.com). Ask for a master license key (MLK) for a test environment.
- Allocate a physical or virtual machine to host the test Code42 server. The machine needs to match the [system requirements](https://support.code42.com/Administrator/6/Planning_and_installing/Code42_platform_hardware_and_software_requirements#Code42_server_requirements) for a Code42 server.
- Allocate a physical or virtual machine—separate from the test server host—to host a test Code42 app. The machine needs to match the [system requirements](https://support.code42.com/Administrator/6/Planning_and_installing/Code42_platform_hardware_and_software_requirements#End_user_application_requirements) for a Code42 app.
- Disconnect your test machines from your production network in order to avoid unintended interaction during testing.
- The test machines do need to communicate with one another.

**Set up the test Code42 server**

1. Assign an IP address to the test host.  
   *Do not use the IP address assigned to your production Code42 server.*

2. If your test environment has a dedicated DNS server, configure a DNS record for the test machine.  
   If there is no DNS server, assign a host name on the test server machine:
   
   i. On the test server machine, open the hosts file with a text editor:
      
      - *Windows*: C:\Windows\System32\Drivers\etc\hosts  
      - *Linux*: /etc/hosts
   
   ii. Add or modify a line to say:
      
      `<IP address><hostname>`
      
      for example:
      
      `192.0.2.101 test-server.example.com`
      
      *Do not use the host name of your production server.*

3. On the test machine, [install a Code42 server](https://support.code42.com/Administrator/6/Planning_and_installing/Install_the_Code42_platform_private_cloud) of the same version as your production Code42 server. During the install, provide your new MLK for testing.
First install the production version, then upgrade
Code42 strongly recommends creating your test environment at the same Code42 version as your production environment. If you want to test a newer version, you can then upgrade the test environment. That way, any testing of new features comes after you have tested and affirmed that the upgrade works.

Production resources to never duplicate in your test environment

In your test environment, do not duplicate the following parts of your production environment:

Master license key
For your test Code42 servers, ask your Customer Success Manager (CSM) (mailto:csmsupport@code42.com) for a new master license key (MLK).

Storage provider key
If your production environment uses data storage in the Code42 cloud, do not use your production provider key in your test environment. Ask your CSM about Code42 cloud options, or use only local storage in your test environment.

Server addresses
The production and test authority servers must have different addresses. For test machines, assign IP addresses and host names different from the production machines. After installing the test authority server, go to Settings > Server (https://support.code42.com/Administrator/6/Administration_console_reference/Server_settings_reference), and set the addresses on the:

- Website protocol, host and port
- Primary network address
- Secondary network address

Server database
Do not import your production database into your test authority server. Doing so may cause your production environment to report incorrect licensing information and may interfere with the provider sync process.
Configure your test environment

Exactly which production details you need to duplicate in your test environment depends on what you intend to test. The following describes some typical suggestions:

Database dumps

Back up and protect your test environment's database as you do your production database. Backing up the database means you can recover your test authority server in the event of trouble or a test that goes bad.

Authentication and authorization

Administrators, users, and Code42 apps in test environments can use accounts defined within the test authority server. Add users in the administration console at Users > Add a new user. You can also use LDAP or SSO in a test environment.

Email server

Every Code42 server has a built-in email server that is sufficient for most test purposes. You may, however, configure your Code42 server to send mail through some other email server. That is particularly advisable if your test environment has a large number of users. Define the email server in the Code42 administration console, at Settings > Server > Email.

Backup settings

Backup settings—at system-wide and organization scales—govern backup frequency, retention, file selection, storage destinations, among other details. To make test and production environments match, you need to manually reproduce some backup settings at the test authority server. In the administration console:

- For settings that apply system-wide, see Settings > Device Backup.
- For settings that apply to individual organizations:
  1. Go to Organizations.
  2. Select an organization by name.
  3. From the action menu, select Device Backup Defaults...
Some global backup settings you can export from production and import to test. See Export and Import at:

- Settings > Device Backup > Backup > Filename Exclusions
- Settings > Device Backup > General > Hidden Filenames
- Settings > Device Backup > General > Global Exclusions
- Settings > Device Backup > General > Cloud Exclusions

Store points

You may create additional store points (https://support.code42.com/Administrator/6/Configuring/Add_storage/Add_a_store_point) in your test environment, beyond the default store point.

If your test and production environments used shared storage, be careful to create separate paths for test and production store points. That will make clear which archives belong to which environment.

Set up test Code42 devices

1. Add Code42 app installer files (https://support.code42.com/Administrator/6/Monitoring_and_managing/Add_clients_to_your_Code42_environment) to your test authority server.
2. At the administration console, select App Downloads.
3. Download Code42 app installer files for your test devices.
4. Install the Code42 app on your test app machines.
   *Customized installers should not be used for upgrade testing.*
5. At Code42 app sign in to the test server.
6. Register the Code42 apps under new user accounts.
7. Use the Code42 apps to back up a small amount of data to the test Code42 server.

Related topics

- Set up a multi-server test environment (https://support.code42.com/Administrator/6/Planning_and_installing/Set_up_a_multi-server_test_environment)
- Key considerations when planning your Code42 environment (https://support.code42.com/Administrator/6/Planning_and_installing/Key_considerations_when_planning_your_Code42_environment)
- Code42 server and app downloads (https://support.code42.com/Administrator/6/Planning_and_installing/Code42_server_and_app_downloads)
- Code42 platform hardware and software requirements (https://support.code42.com/Administrator/6/Planning_and_installing/Code42_platform_hardware_and_software_requirements)
- Code42 server configuration recommendations (https://support.code42.com/Administrator/6/Configuring/Code42_server_configuration_recommendations)