

CryPtoD - Installation instructions

Database installation

Requirements:

- MongoDB community installer

Installation:

- Download and run MongoDB from <https://www.mongodb.com/try/download/community>
- When prompted:
 - Choose “complete” installation
 - “Install MongoDB as a service”
 - “Run service as Network Service user”
 - “Install MongoDB Compass”
 - “Install”

MongoDB Compass is a Database management tool which enables you to see your databases, collections and so forth, as well as perform queries and other operations.

Python installation

Requirements:

- Python 3.8+ installer

Installation:

- Download and run Python installer from <https://www.python.org/downloads>
- Check “Add python 3.x to PATH”
- Click “Install now”

Web-server installation

Requirements:

- XAMPP installer

Installation:

- Download XAMPP from <https://www.apachefriends.org/download.html>
 - CryPtoD supports PHP 7.4.xx (using another version *will* cause problems!)
- Install XAMPP
 - Note installation location as this will be needed later (default is “c:\xampp”)
 - Necessary components (all other components may be omitted):
 - Apache
 - PHP

- Choose to ignore Bitnami

Subsystem installation

These instructions *do not* cover Heimdal.

Subsystems include:

- Mimir
- Odin
- Saerimner

Requirements:

- CryPtoD codebase (excluding Heimdal)
- Python 3.8 (or later)
- Pip (installed with python)

Notice: Currently it is only necessary to execute “pip install -r requirements.txt” from root folder to install all requirements.

In a terminal/console (using Pycharm and a virtual environment is highly recommended) Navigate to the subsystem folder (f.ex. “c:\CryPtoD\odin”) and execute “pip install -r requirements.txt”. This should install all requirements for the given subsystem. After complete install of requirements execute “python <subsystem>.py” (f.ex. “python odin.py”) and the program should run.

Should there be missing database requirements, the executed program should inform the user - a good order of installation/execution is:

- Saerimner
- Mimir
- Odin

Running the programs once in this order will ensure that the necessary databases are set up.

Web-server setup (Heimdal)

Requirements:

- XAMPP (pre-installed)
- Heimdal (found in CryPtoD codebase)

Installation:

- Copy folder “Heimdal” (from CryPtoD) to htdocs in xampp folder (default is “c:\xampp\htdocs”)
- From *CryPtoD\heimdal\files_and_drivers* copy *php_mongodb.dll* to ext folder in XAMPP (default is “c:\xampp\php\ext”)

- Edit php.ini located in php folder in xampp (default is "c:\xampp\php")
 - Locate "Dynamic extensions" (line 885) and add "*extension=mongodb*" to the list of extensions.

Running the software:

- Open XAMPP control panel and start Apache
- Open a browser and navigate to "localhost/heimdal/php_gui"
- Enter user name "admin" and password "admin" to access the system