NOTE
This guide documents a typical Ordo installation on a UNIX derived OS and does not cover advanced installation configurations.

It is geared to seasoned system administrators¹ and does not go into details about how to install prerequisite software and/or packages.

If this is out of your comfort zone contact the ITD Help Desk at extension 5522 for assistance.

PREREQUISITES
- Connection to internal BNL network
- Properly installed bash shell
- Modern version of Perl (> 5.8)
- GnuPG
- Synchronized system clock (http://intranet.bnl.gov/itd/ntp/)
- File transfer program
  - curl
  - wget

INSTALLATION

ORDO USER
The Ordo Client runs on each machine as a regular user (ordo) and requires a local user account. If domain authentication is used, it is imperative that the ordo user home directory is local to the machine and owned by the ordo user. The user stores state information for each machine from the Ordo tests to enable updates to the server only when configuration information changes.

CREATE ORDO USER
Initial creation must be done by a local system administrator (sudo su -)

¹ It is assumed that seasoned system administrators are knowledgeable with package requirements and capable of troubleshooting failed installations.
DOWNLOAD THE LATEST TAR BALL FROM THE MASTER

- Untar in ordo home directory

SET ENV VARIABLES (OPTIONAL)

Setting ENV variables can ease installation if it is scripted. If set, the following ENV variables will be honored by the install script, which will continue without prompting for a value.

This should be done prior to running the initialization script.

**ORDO_BASE** */home/ordo*
Local home directory of the ordo user on the client being installed.

**ORDO_GPGBIN** */usr/bin/gpg*
Full path to the gpg binary.

**GNUPGHOME** */$ORDO_BASE/data/gpg*
Path for GPG key rings.

**ORDO_EMAIL** *(no default)*
Real, deliverable email address where notifications/status reports will be sent, should be set to something you, as an admin, read.

**ORDO_SMTP_SERVER** *(bnl.gov)*
SMTP server to be used for sending mail.
Must be a working server from your location or Ordo will fail.

**MAILDOMAIN** *(bnl.gov)*
Set for mail utils in Perl modules.

**ORDO_NAME** *(hostname)*
Name of the ordo client, used to identify host where installed.
This must not contain the string “localhost”.

**ORDO_PERL** */usr/bin/perl*
Full path to a modern, working Perl installation.
RUN THE INITIALIZATION SCRIPT

As the ordo user, from the home directory run

```
./client/ordo-init
```

The following is typical input/output from the install script. After running ordo-init the script should always end with a valid GPG_ID.

```
-#-4.2$ ./client/ordo-init
Perl is: ORDO_PERL=/bin/perl
Where is the ordo distribution base?, (def = "/var/lib/ordo")
You want "/var/lib/ordo", okay? (Y/n)
Ordo base dir is: ORDO_BASE=/var/lib/ordo
Checking system clock
Checking UID
Checking Permissions

ORDO_NAME: rhel64c.itd.bnl.gov
Ordo client name is: ORDO_NAME=some-machine.itd.bnl.gov
What email address to use for client?, (def = "you@bnl.gov")
You want "you@bnl.gov", okay? (Y/n)
Ordo client email is: ORDO_EMAIL=you@bnl.gov
What email server to use?, (def = "bnl.gov")
You want "bnl.gov", okay? (Y/n)
SMTP server is: ORDO_SMTP_SERVER=bnl.gov
What is default MAILDOMAIN to use?, (def = "bnl.gov")
You want "bnl.gov", okay? (Y/n)
Email server is: MAILDOMAIN=bnl.gov
Deleting state files: /var/lib/ordo/data/state.*
Setting crontab
GPG_ID is: 3D0A2200

After successful installation you can get info about it.

-#-4.2$ ./client/info.pl

Ordo Client Data

```
ORDO_NAME  rhel64c.itd.bnl.gov
VERSION  beta-5-56
ORDO_EMAIL  you@bnl.gov
ORDO_SMTP_SERVER  bnl.gov
GPG_ID  3D0A2200
```
GET A STATUS REPORT

You can get a status report back from the server. This is a report from the master’s database that shows what information the master knows about the client. If it is an initial install, it could take up to an hour or more before any data shows up in the report, depending on the load on the master updating data in the database. If you don’t get a report back try again in an hour. If after 24 hours you still don’t get a report, there could be something wrong with your installation. You can call the Help Desk at extension 5522 for assistance.

The following is typical output from a successful client installation:

Ordo Status Check for GPG_ID: BCB65DA9

Host ID:

<table>
<thead>
<tr>
<th>DBTIME</th>
<th>19-DEC-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOSTNAME</td>
<td>hollin.itd.bnl.gov</td>
</tr>
<tr>
<td>VENDOR</td>
<td>Mac</td>
</tr>
<tr>
<td>KERNEL</td>
<td>15.6.0</td>
</tr>
<tr>
<td>KERNEL_VER</td>
<td>Darwin</td>
</tr>
<tr>
<td>RELEASE_NAME</td>
<td>OS X 10.11.6 (15G1212)</td>
</tr>
<tr>
<td>CPU</td>
<td>x86_64</td>
</tr>
</tbody>
</table>

NICS:

<table>
<thead>
<tr>
<th>MAC_ADDRESS</th>
<th>INTERFACE_NAME</th>
<th>IP_ADDRESS</th>
<th>NETMASK</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>001B63AA0038</td>
<td>en0</td>
<td>130.199.130.70</td>
<td>255.255.254.0</td>
<td>UP</td>
</tr>
<tr>
<td>001D4FF8B944</td>
<td>en1</td>
<td></td>
<td></td>
<td>DOWN</td>
</tr>
<tr>
<td>NONE</td>
<td>fw0</td>
<td></td>
<td></td>
<td>DOWN</td>
</tr>
<tr>
<td>NONE</td>
<td>gif0</td>
<td></td>
<td></td>
<td>DOWN</td>
</tr>
<tr>
<td>NONE</td>
<td>lo0</td>
<td>127.0.0.1</td>
<td>255.0.0.0</td>
<td>UP</td>
</tr>
<tr>
<td>NONE</td>
<td>stf0</td>
<td></td>
<td></td>
<td>DOWN</td>
</tr>
</tbody>
</table>

UPDATES as of 04-JAN-2017:

<table>
<thead>
<tr>
<th>LAST_FAST</th>
<th>LAST_FULL</th>
<th>LAST_HB</th>
<th>LAST_UPDATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>04-JAN-2017</td>
<td>03-JAN-2017</td>
<td>04-JAN-2017</td>
<td></td>
</tr>
</tbody>
</table>