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Golem Network Provider Node

(Mostly) Automated Deployment Presentation

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Github - <https://github.com/r34x/Automatic-Golem>

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Purpose

The reason behind this automated provider install is to help standardize installations across the network to known-good states. This will aid in troubleshooting nodes and resolving bugs.



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Objective

The objective is to build a 90-95% automated build that will aid new providers in setting up their nodes without needing a lot of Linux or blockchain experience. This will help providers become more effective with less troubleshooting.



Prerequisites

The following prerequisites must be met in order for this to work:

- Debian-based Linux install (Ubuntu, Mint, etc...)
- **KVM Must be installed prior to running the Provider installer.**
 - You can test this by running `sudo kvm-ok` to verify
- **BASIC** Linux experience, but this whole project is geared towards inexperienced users with limited experience.



Instructions

1. Download GolemDeploy.sh and golemsp.service from <https://github.com/r34x/Automatic-Golem>
2. Copy the files to the Linux machine you wish to deploy on. Recommend putting them in the /home/<user>/Documents folder.
3. Copy or move the golemsp.service file to /etc/systemd/system.
4. Edit the golemsp.service file and change the fields that contain <your username> to whatever the username of the system is. Remove the brackets when doing so.
5. Navigate to /home/<user>/Documents
6. Launch the installer by running ./GolemDeploy.sh
7. Follow the on-screen instructions
8. Enjoy your newly configured provider!

Demo Walkthrough.



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A screenshot of a terminal window titled 'Golem Provider1' running within a vSphere environment. The terminal shows the output of a command to upgrade packages. The output lists the packages to be upgraded, the disk space requirements, and the progress of the upgrade process. The terminal text is as follows:

```
yegna@golem-provider: ~/Documents
File Edit View Search Terminal Help
The following packages will be upgraded:
  curl libcurl3-gnutls libcurl4 ubuntu-dbgsym-keyring ubuntu-keyring
5 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 656 kB of archives.
After this operation, 0 B of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 ubuntu-keyring all 2020.02.11.4 [22.1 kB]
Get:2 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libcurl3-gnutls amd64 7.68.0-1ubuntu2.5 [232 kB]
Get:3 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 curl amd64 7.68.0-1ubuntu2.5 [161 kB]
Get:4 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libcurl4 amd64 7.68.0-1ubuntu2.5 [234 kB]
Get:5 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 ubuntu-dbgsym-keyring all 2020.02.11.4 [0,956 B]
Fetched 656 kB in 1s (869 kB/s)
(Reading database ... 318265 files and directories currently installed.)
Preparing to unpack .../ubuntu-keyring_2020.02.11.4_all.deb ...
Unpacking ubuntu-keyring (2020.02.11.4) over (2020.02.11.2) ...
Setting up ubuntu-keyring (2020.02.11.4) ...
[Progress bar showing 100% completion]
```

This walkthrough assumes you already have KVM installed as part of the prerequisites. It does not show copying the `golemsp.service` file to `/etc/systemd/system` or modifying the file.



Monitoring Your Provider

I've added some nice features for monitoring your system and Golem Provider.

- A Netdata install is included that allows you to monitor every aspect of your machine. More info about Netdata is available on their site
 - <https://www.netdata.cloud/>
- I've also included a continuous monitoring command to monitor the provider itself by setting up a watch command to refresh the `golemsp status` command every 2 seconds. My testing has shown that this also helps keep the provider alive by sending input to the system so no timeouts happen for inactivity.



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Conclusion

This project was a lot of fun to work on and I hope it helps you become a better provider and allows you to get up to speed quickly. If you have any questions, please reach out. My contact info is on Page 1.

Thank you!