PlanetLab Europe Tutorial
Installing a Node

An open, shared platform for developing, deploying, and accessing planetary scale applications

FIREWORKS

PlanetLab Europe

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Tutorial Site

- The tutorial (pdf slides) are available at:

   http://www.planet-lab.eu/tutorials

- The live system is available at:

   http://www.planet-lab.eu

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In this tutorial

- Node Requirements
  - Legal
  - Equipment
  - Recommended Configuration
  - Network
- Preparations
- Installing a Node

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Requirements - Legal

- Registered site
  - Only a PI or Tech Contact can add a node to a site
  - Uploaded SSH key

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Requirements- Equipment

- Recent Pentium

- 1 GB RAM

- CD ROM or USB Drive

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Recommended Configuration

- 4 GB RAM

- At least 320 GB hard disk

- At least 1 Mb/sec connection to the Internet

- Intel Pentium 3.2Ghz, AMD 3200+, or 2.4GHz MultiCore/Dual Core
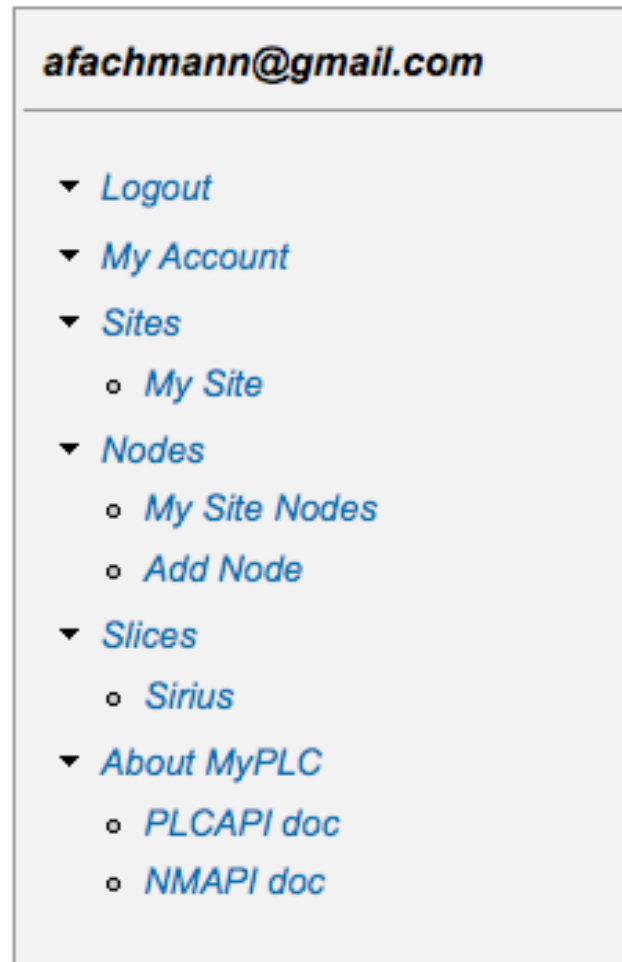
- External PCU optional

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Requirements - Network

- Nodes MUST
  - Be connected to the Internet
    - Outside of Firewall
    - No NAT
  - Have a visible, public DNS name
  - Recommended to not have an IDS or Proxy upstream of the node

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Preparations

- Have the following information:
  - IP Address
  - Netmask
  - Network address
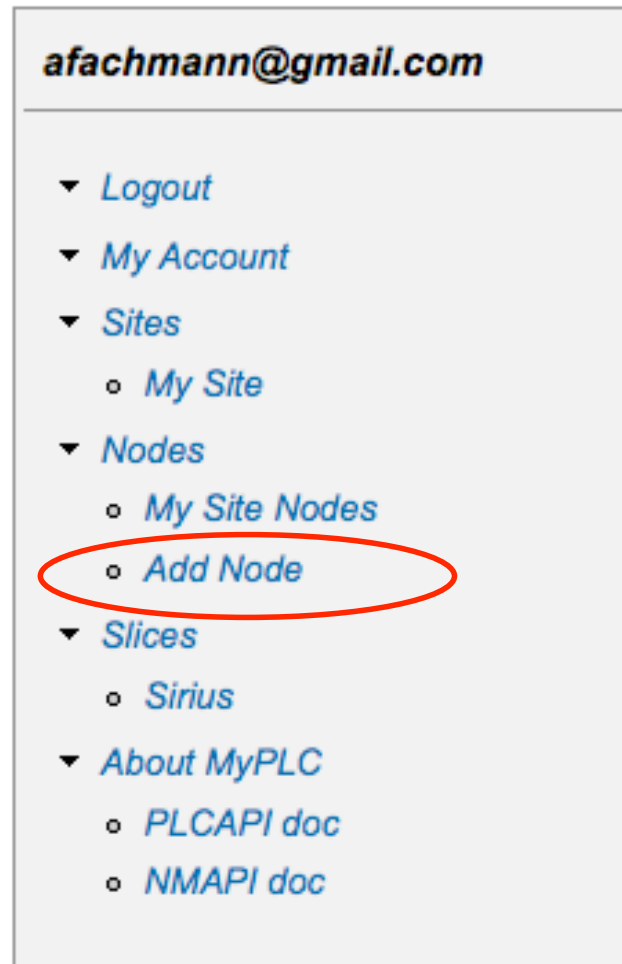 - Gateway address
  - Broadcast address
  - 2 DNS servers

Installing a Node

Login as Tech Contact

Installing a Node

Select Add Node

Installing a Node

Fill in the form

Add a new node in site ""

This page lets you declare a new machine in your site. This must be done before the machine is turned on, as it will allow you to download a boot image when complete for this node. You must enter an IP address even if you use DHCP.

Hostname	
Model	Custom
Method	Static
IP address	
Netmask	
Network	
Broadcast	
Gateway	
DNS 1	
DNS 2	
BW limit (bps)	

Add New Node

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Installing a Node

Click Add New Node

Installing a Node

Click Add New Node

Installing a Node

- Download iso from the PLC
- Burn to CD or copy to USB
- Insert media on node
- Boot from media

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Installing a Node

- Answer Yes to installation request
- Wait while the node is formatted and installed (60 minutes or more depending on network connection)

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References

- See the video tutorial "Installing a Node"
  - http://www.dailymotion.com/PlanetLabEurope
  - http://www.youtube.com/user/PlanetLabEurope
- PlanetLab official Web site: http://www.planetlab.org/
- L. Peterson, S. Muir, Timothy Roscoe, and Aaron
- Klingaman PlanetLab Architecture: An Overview. Technical Report, PlanetLab, May 2006
- L. Peterson and T. Roscoe. The Design Principles of PlanetLab.
- *Operating Systems Review (OSR), 40(1):11.16, Jan. 2006.*

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