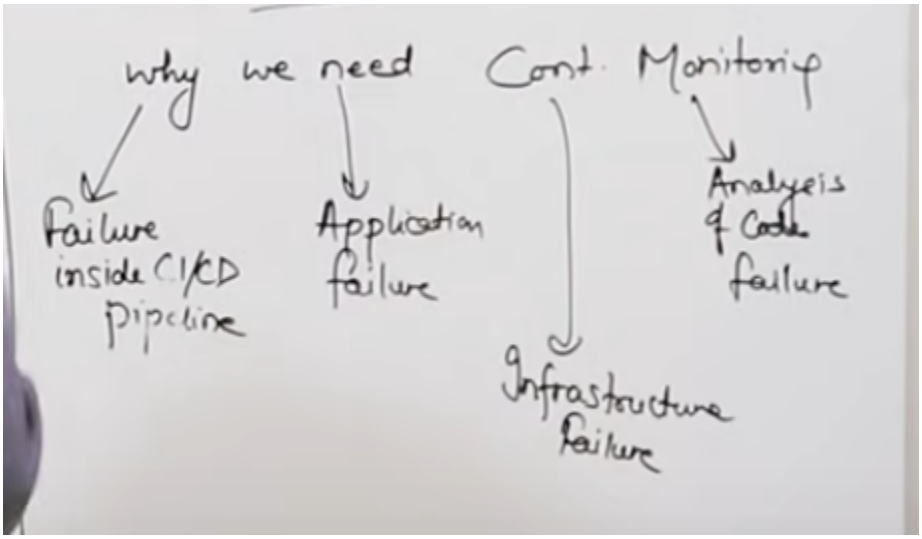
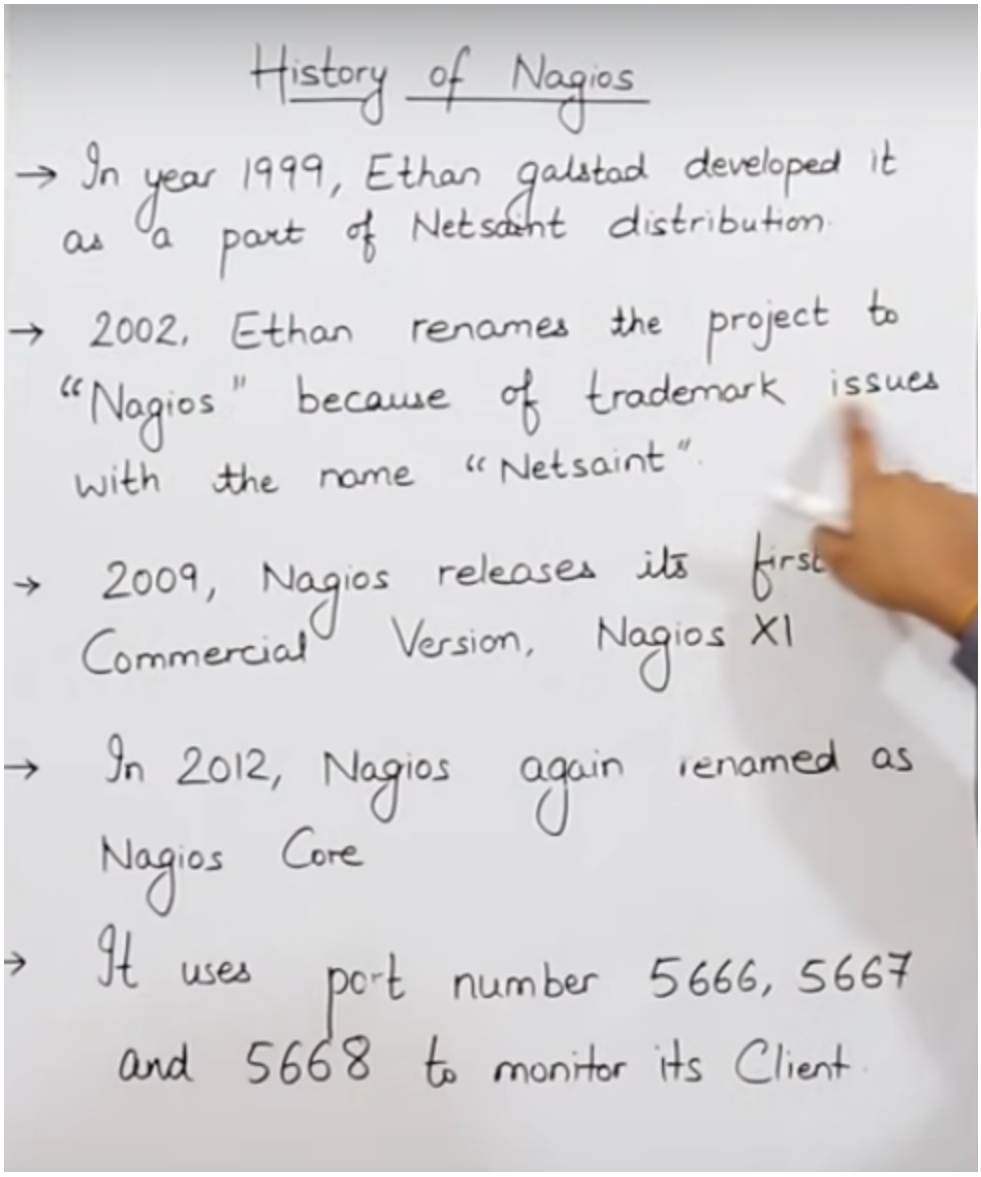
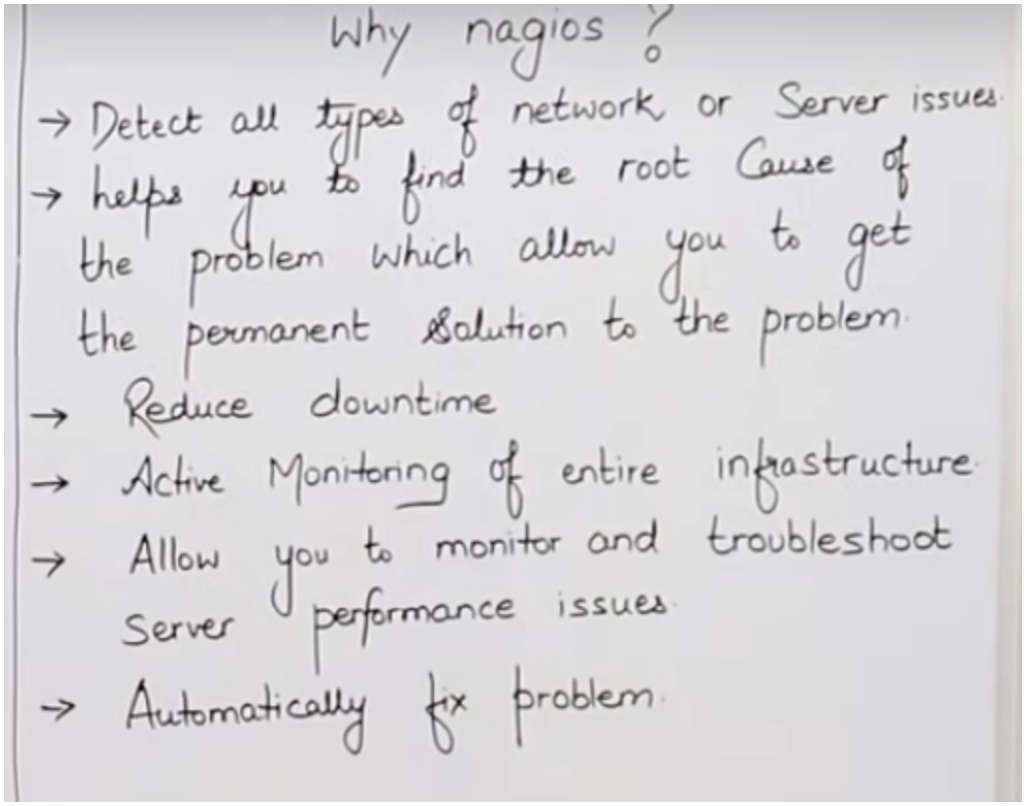
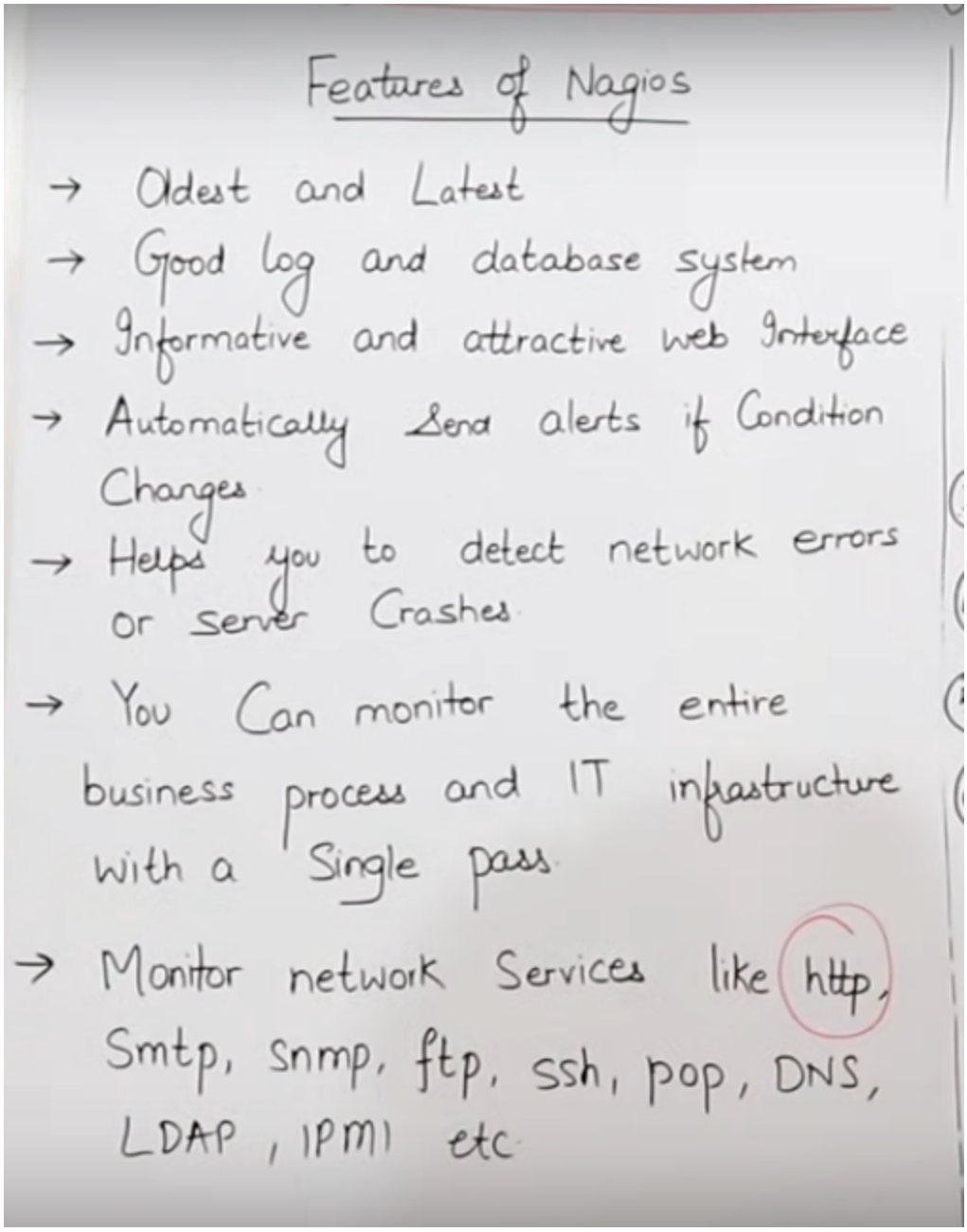
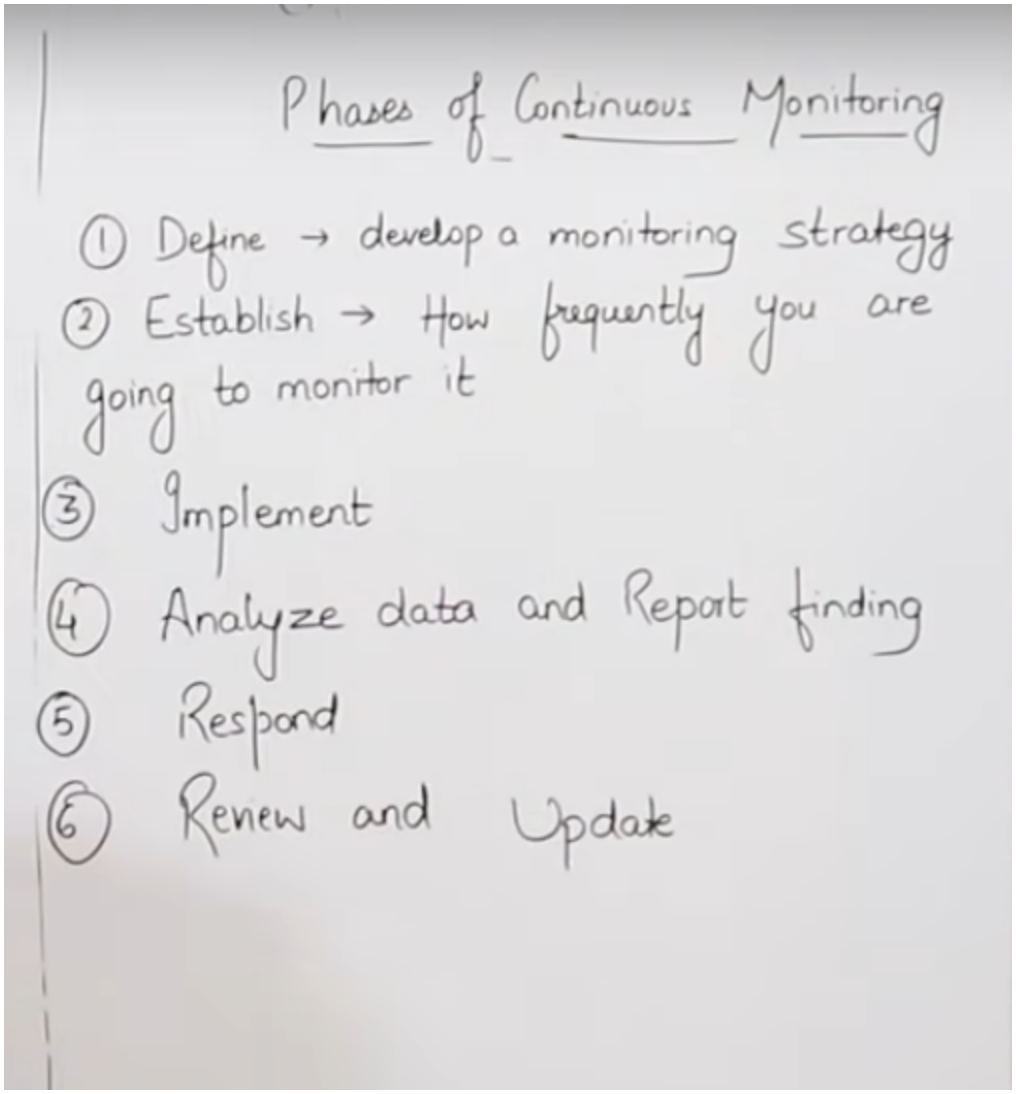
Nagios → Nagios is an open-source software for Continuous Monitoring of Systems, networks and infrastructure. It runs plugins stored on a Server which is Connected with a host or another Server on your Network or the internet. In Case of any failure, Nagios Alerts about the issues so that the technical team Can perform recovery process immediately.

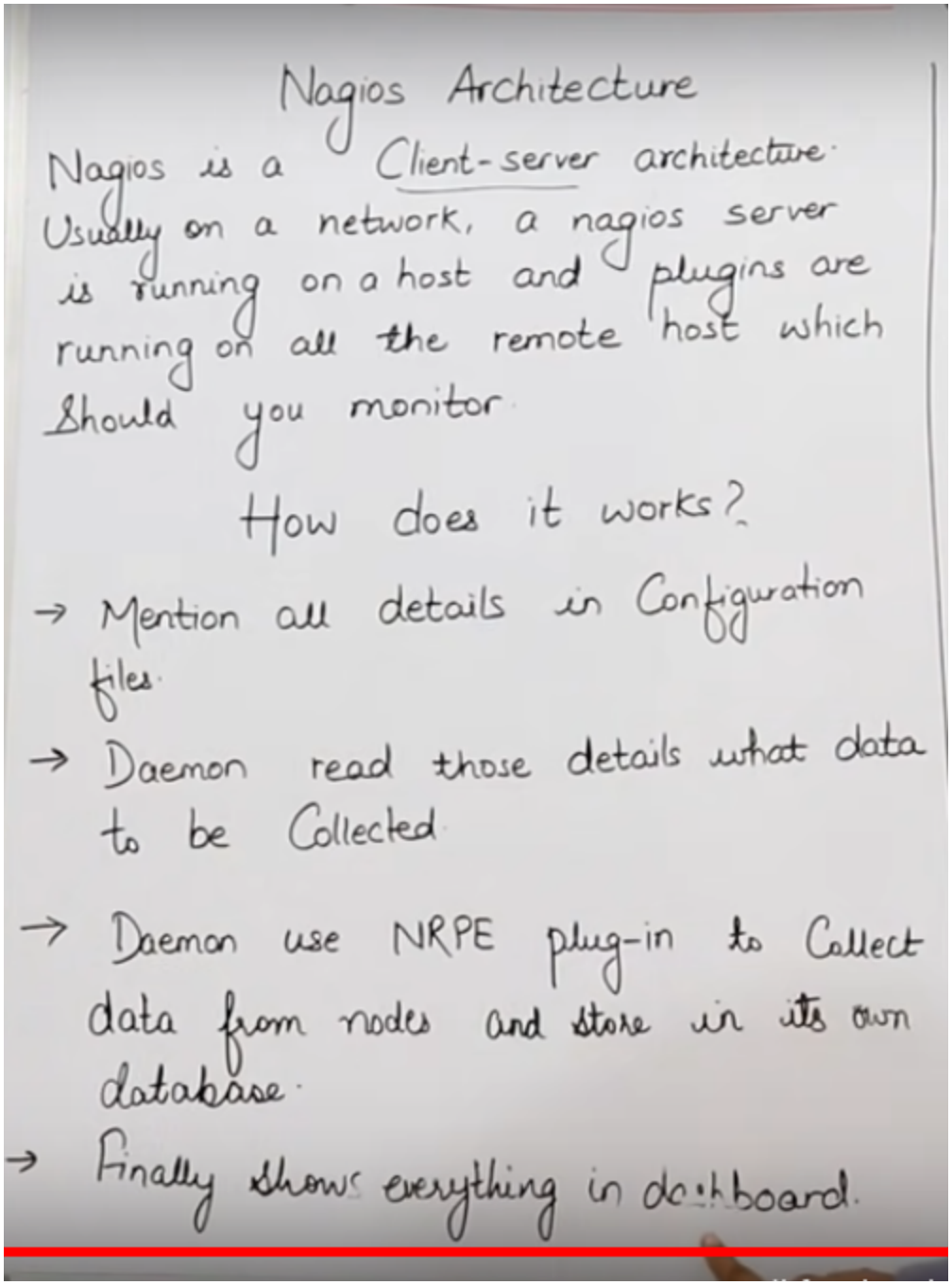


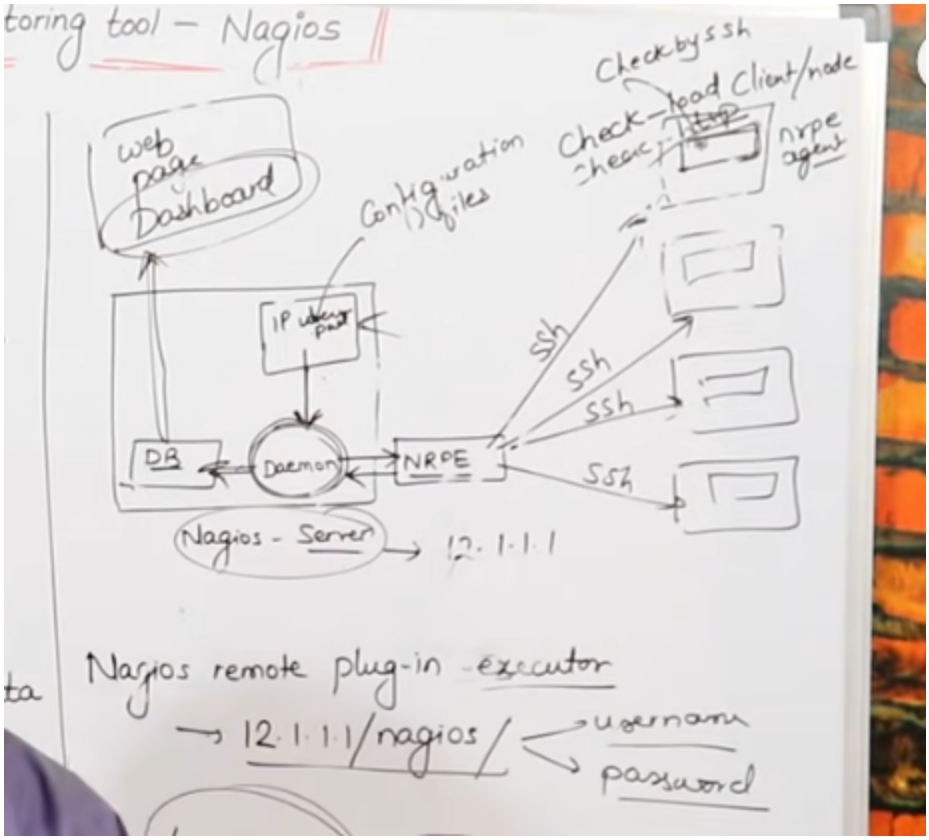

History of Nagios
→ In year 1999, Ethan galstad developed it as a part of Netsaint distribution.
→ 2002, Ethan renames the project to "Nagios" because of trademark issues with the name "Netsaint".
→ 2009, Nagios releases its first Commercial Version, Nagios XI
→ In 2012, Nagios again renamed as Nagios Core
→ It uses port number 5666, 5667 and 5668 to monitor its Client.

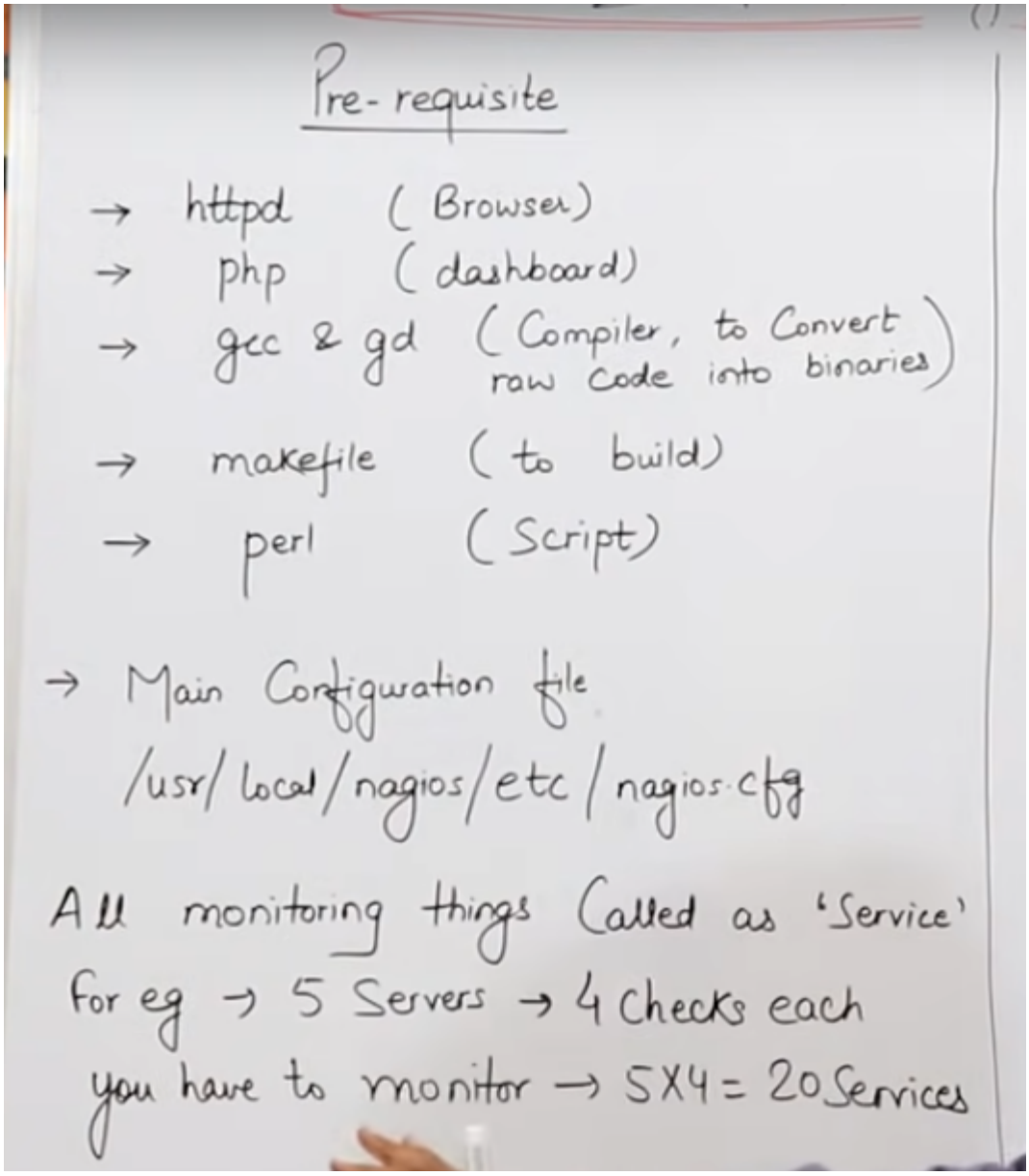

Why nagios ?
→ Detect all types of network or Server issues.
→ helps you to find the root Cause of the problem which allow you to get the permanent Solution to the problem.
→ Reduce downtime
→ Active Monitoring of entire infrastructure.
→ Allow you to monitor and troubleshoot Server performance issues.
→ Automatically fix problem.

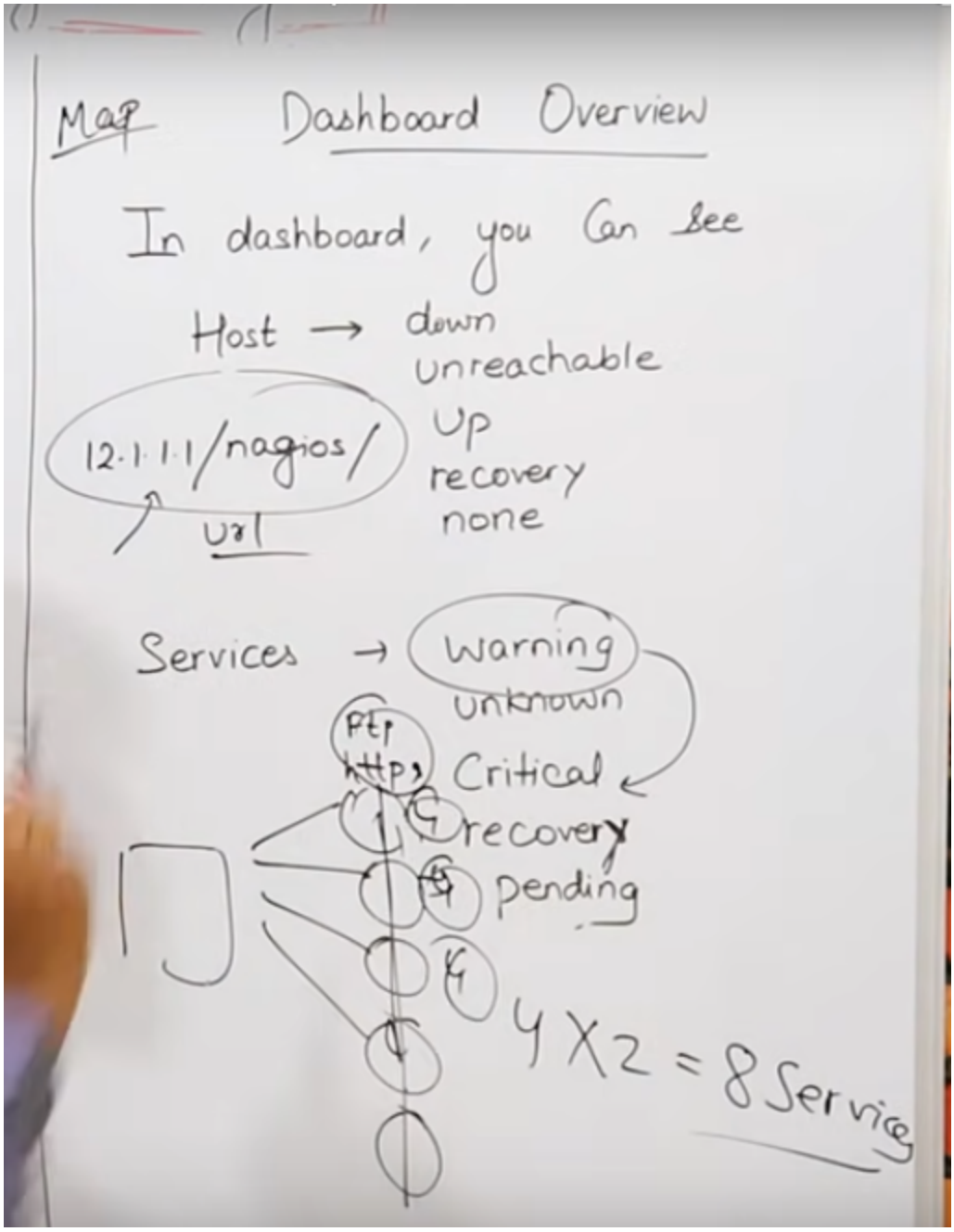

Features of Nagios
→ Oldest and Latest
→ Good log and database system
→ Informative and attractive web Interface
→ Automatically Send alerts if Condition Changes
→ Helps you to detect network errors or server Crashes
→ You Can monitor the entire business process and IT infrastructure with a Single pass
→ Monitor network Services like http, Smtp, snmp, ftp, ssh, pop, DNS, LDAP, IPMI etc


Phases of Continuous Monitoring
1 Define → develop a monitoring strategy
2 Establish → How frequently you are going to monitor it
3 Implement
4 Analyze data and Report finding
5 Respond
6 Review and Update


Nagios Architecture
Nagios is a Client-server architecture.
Usually on a network, a nagios server is running on a host and plugins are running on all the remote host which should you monitor.
How does it works?
→ Mention all details in Configuration files.
→ Daemon read those details what data to be Collected.
→ Daemon use NRPE plug-in to Collect data from nodes and store in its own database.
→ Finally shows everything in dashboard.


toring tool – Nagios
Check by ssh
load Client/node
web page
Dashboard
Configuration files
nrpe agent
IP
DB
Daemon
NRPE
ssh
ssh
ssh
ssh
Nagios - Server
12.1.1.1
Nagios remote plug-in executor
12.1.1.1/nagios/
username
password


Pre-requisite
→ httpd (Browser)
→ php (dashboard)
→ gcc & gd (Compiler, to Convert raw code into binaries)
→ makefile (to build)
→ perl (Script)
→ Main Configuration file
/usr/local/nagios/etc/nagios.cfg
All monitoring things Called as 'Service'
for eg → 5 Servers → 4 Checks each
you have to monitor → 5X4 = 20 Services


Map
Dashboard Overview
In dashboard, you Can See
Host → down
unreachable
up
recovery
none
12.1.1.1/nagios/
Url
Services → Warning
unknown
Ftp
Http
Critical
recovery
pending
4 X 2 = 8 Services

Lec-44 Installation of Nagios on Linux

To start Nagios Core installation you must have your EC2 instance up and run and have already Configured SSH access to the instance.

Step-1 → Install pre-requisite Softwares on your EC2 machine prior to Nagios installation like apache, php, gcc Compiler and gd development libraries.

```
→ Sudo su
→ yum install httpd php
→ yum install gcc glibc glibc-common
→ yum install gd gd-devel
```

Step 2 Create account information you need to setup a nagios user. Run the following Commands:-

```
→ adduser -m nagios
→ passwd nagios
```

Now, it ask to enter new password give '12345' as password

```
→ groupadd nagioscmd
→ usermod -a -G nagioscmd nagios
→ usermod -a -G nagioscmd apache
```

Step 3 :- Download nagios Core and the plugins. Create a directory for storing the downloads

```
→ mkdir ~/downloads
→ cd ~/downloads
```

Lec-44 Installation of Nagios on Linux

Download the Source Code tarballs of both nagios and the nagios plugins

```
→ wget http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.gz
→ wget http://nagios-plugins.org/download/nagios-plugins-2.0.3.tar.gz
```

Step 4 :- Compile and install Nagios extract the nagios source code tarball

```
→ tar zxvf nagios-4.0.8.tar.gz
  cd nagios-4.0.8
```

Run the Configuration Script with the name of the group which you have Created in above step.

```
→ ./configure --with-command-group=nagioscmd
```

Compile the Nagios Source Code

```
→ make all
```

Install Binaries, init script, sample Config files and set permissions on the external Command directly

```
→ make install
→ make install-init        (To Compile init Script)
→ make install-config
→ make install-commandmode
```

Step 5 :- Configure the Web interface

```
→ make install-webconf
```

Nagios Notes : **t.me/vishalk17**

https://tecadmin.net/install-nagios-monitoring-server-on-ubuntu/

https://tecadmin.net/monitor-remote-linux-host-using-nagios/

https://www.youtube.com/watch?v=4MueJSBRjv0&list=PLBGx66SQNZ8aPsFDwb79JrS2KQBTIZo10&index=43

https://www.youtube.com/watch?v=H9uRoLS_8ks&list=PLBGx66SQNZ8aPsFDwb79JrS2KQBTIZo10&index=44