



How to make an eAcademy Learning Unit

Dónal Cunningham, HEAnet
Network eAcademy Development Team

Training by the GÉANT project:

<https://wiki.geant.org/display/NETDEV/Network+Automation+Training>

network-eacademy@lists.geant.org

Agenda



- What, Why and How to Present
- Sound Basics
- Video Basics
- Presentation Basics
- The Considerations document

- How to use the eAcademy Moodle
 - Adding/removing sections, links to videos, etc.

What, Why and How

What are you presenting?

- Learning unit, how-to, Infoshare?
- Slides, web pages, CLI commands
- Timescale

Why are you presenting this?



**GN5-2
member**

Contributing to the
eAcademy



**Peer
pressure**

Someone ~~volunteered you~~
asked you to do it



**Sharing
Knowledge**

Help Others



**Giving
back**

Helping others as you
were helped

GÉANT eAcademy

Welcome to GÉANT eAcademy!

To access eAcademy, please, use "**Log in**" area in the upper right corner and select your choice of authentication.

By continuing to use this site, you agree to the processing of your personal data as indicated in the [GÉANT Privacy Notice](#).

To navigate the available courses, go to [All Courses](#).

Happy learnings!

Network Automation eAcademy

Do you want to learn more about **Orchestration, Automation and Virtualisation (OAV)**?



Introduction to automated monitoring: Nagios

Course Settings Participants Grades Reports More ▾

OVERVIEW Part I: Introduction to Nagios Part II: Adding Local Checks Part III: Adding Remote Checks Part IV: Email and SMS Notifications
Part V: Groups and the GUI Useful Links Feedback & Certificate What's Next?

Welcome to the Nagios learning unit.



<p>COURSE DATE:</p> <p>On Demand</p>	<p>DURATION:</p> <p><2 Hours></p>	<p>COMMITMENT:</p> <p><2 Hours></p>
<p>REQUIREMENT:</p> <p><No Prerequisites></p>	<p>COURSE TYPE:</p> <p>Self-paced</p>	<p>CREDENTIAL:</p> <p>Certificate of Completion</p>





 Python - Part 1: Python & Jupyter notebooks Share

GÉANT
Networks · Services · People

Python Part I: Introduction to Python & Jupyter Notebooks

Iacovos Ioannou, CyNet
Orchestration, Automation and Virtualisation (OAV)
Training Development Team

OAV training by the GÉANT project:
<https://wiki.geant.org/display/NETDEV/OAV+Training+Portal>

oav@lists.geant.org

www.geant.org
Watch on  YouTube



Scripts to install Jupyter and Python Archive (ZIP)

Scripts to install Jupyter and Python in CentOS and Ubuntu.



Part I: Introduction to Python & Jupyter Notebooks – handout PDF document



Git Repository

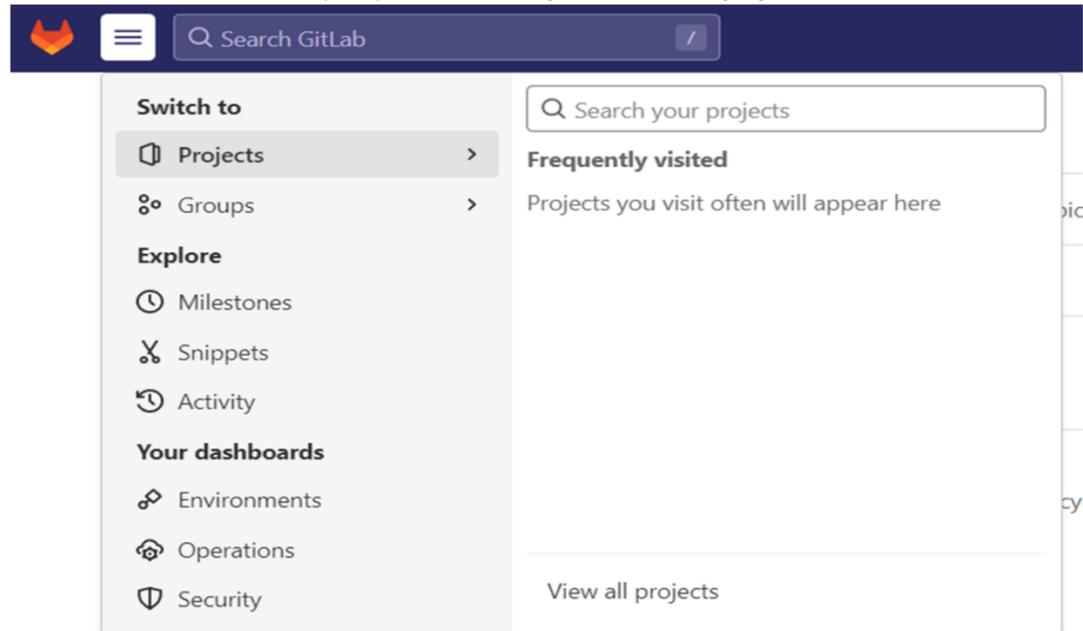
A repository is simply a storage space for the source code of a project. GitLab allows developers to push their local repository into a central one, sharing their code with other collaborators. Repositories can contain folders, files, images and generally everything a project can include. The changes are tracked with version control.

This tab explains how to create a repository, by creating a project or forking an existing one, how to delete a project and how to clone a project. It also covers analytics graphs.

How to Create a New Project

To create a new project:

1. Select the **Menu** icon on the top bar, then select **Projects > View all projects**.



2. Click **New project**.

Projects

New project





Nagios Part 5: Groups and the GUI

Oct 17 01:41



Browser tabs: Nagios Core Demo, Nagios: nagioscore.demos.com

URL: https://nagioscore.demos.nagios.com/nagios/

Nagios

- General
 - Home
 - Documentation
- Current Status
 - Tactical Overview
 - Map (Legacy)
 - Hosts
 - Services
 - Host Groups
 - Service Groups
- Problems
 - Services (Unhandled)
 - Hosts (Unhandled)
 - Network Outages
- Reports
 - Availability
 - Trends (Legacy)
 - Alerts
 - History
 - Summary
 - Histogram (Legacy)
 - Notifications
 - Event Log
- System
 - Comments
 - Downtime
 - Performance Info
 - Scheduling Queue
 - Configuration

Quick Search:

Host	Services	Actions
now.com	DNS IP Match, DNS Resolution, HTTP, Ping, SSL Certificate, servicenow URL Content, servicenow URL Status, / Disk Usage, /boot Disk Usage, ActiveHostChecks 15min, ActiveHostChecks 1min, ActiveHostChecks 5min, ActiveServiceChecks 1min, Apache 404, Errors, AvgActiveHostLatency, AvgActiveServiceLatency, AvgPassiveHostLatency, Bandwidth Spike, CPU Stats, CPU Usage, Cron Scheduling Daemon, Current Load, Current Users, DHCP, DNS IP Match, DNS Resolution, Failed SSH Logins, HTTP, Linux Failed Logins, Load, Memory Usage, MongoDB Collections, MongoDB Connection, MongoDB Databases, MongoDB Flush Time Average, MongoDB Free Connections, MongoDB Index Miss Ratio, MongoDB Last Flush Time, MongoDB Lock Time, MongoDB Mapped Memory Usage, MongoDB Memory Usage, MongoDB Queries Per Second, MongoDB Replicaset State, MongoDB Replication Lag, MongoDB Replication Lag Percentage, MySQL Connection Time, MySQL Crashed Tables, MySQL Index Usage, MySQL InnoDB Buffer Pool Hit Rate, MySQL InnoDB Log Waits, MySQL Long Running Processes, MySQL MyISAM Key Cache Hit Rate, MySQL Open Connections, MySQL Query Cache Hit Rate, MySQL Slow Queries, MySQL Thread Cache Hit Rate, MySQL Uptime, Open Files, PING, Ping, Port 22 Bandwidth, Port 80 Bandwidth, Postgres Backend Connections, Postgres Connection Status, Postgres Database Connection - postgres, Postgres Database Sequences - postgres, Postgres Database Size - postgres, Postgres Relation Sizes - postgres, Postgres Table Sizes - postgres, Root Partition, SNMP Traps, SSH, SSH Server, Swap Usage, Total Processes, Uptime, Users, XI Software Updates, Youtube Usage, Yum Updates, URL Status, movie URL Status	<input type="checkbox"/>
localhost	Active Directory Server, SNMP Traps	<input type="checkbox"/>
Hostgroup Two (hg2)		
192.168.5.41	Ping, SNMP Traps	<input type="checkbox"/>
localhost	/ Disk Usage, /boot Disk Usage, ActiveHostChecks 15min, ActiveHostChecks 1min, ActiveHostChecks 5min, ActiveServiceChecks 1min, Apache 404 Errors, AvgActiveHostLatency, AvgActiveServiceLatency, AvgPassiveHostLatency, Bandwidth Spike, CPU Stats, CPU Usage, Cron Scheduling Daemon, Current Load, Current Users, DHCP, DNS IP Match, DNS Resolution, Failed SSH Logins, HTTP, Linux Failed Logins, Load, Memory Usage, MongoDB Collections, MongoDB Connection, MongoDB Databases, MongoDB Flush Time Average, MongoDB Free Connections, MongoDB Index Miss Ratio, MongoDB Last Flush Time, MongoDB Lock Time, MongoDB Mapped Memory Usage, MongoDB Memory Usage, MongoDB Queries Per Second, MongoDB Replicaset State, MongoDB Replication Lag, MongoDB Replication Lag Percentage, MySQL Connection Time, MySQL Crashed Tables, MySQL Index Usage, MySQL InnoDB Buffer Pool Hit Rate, MySQL InnoDB Log Waits, MySQL Long Running Processes, MySQL MyISAM Key Cache Hit Rate, MySQL Open Connections, MySQL Query Cache Hit Rate, MySQL Slow Queries, MySQL Thread Cache Hit Rate, MySQL Uptime, Open Files, PING, Ping, Port 22 Bandwidth, Port 80 Bandwidth, Postgres Backend Connections, Postgres Connection Status, Postgres Database Connection - postgres, Postgres Database Sequences - postgres, Postgres Database Size - postgres, Postgres Relation Sizes - postgres, Postgres Table Sizes - postgres, Root Partition, SNMP Traps, SSH, SSH Server, Swap Usage, Total Processes, Uptime, Users, XI Software Updates, Youtube Usage, Yum Updates, URL Status, movie URL Status	<input type="checkbox"/>
mil41s03-in-f4.1e100.net	Active Directory Server, SNMP Traps	<input type="checkbox"/>
mil41s03-in-f4.1e100.net	CPU Usage for VMHost, Datastore usage for VMHost, Input / Output for VMHost, Memory for VMHost, Networking for VMHost, SNMP Traps, Services for VMHost, VM Status for	<input type="checkbox"/>

MORE VIDEOS

Sound Basics

Built-in Microphone



Cost: free!

Quality: meh

Photo by [Kari Shea](#) on [Unsplash](#)

Earbuds/Headphones



Cost: free/low

Quality: better

Photo by [Debbie Hudson](#) on [Unsplash](#)

Headset



Cost: low/mid

Quality: good

Photo by [Petr Macháček](#) on [Unsplash](#)

USB Microphone



Cost: mid/high

Quality: v. good

Photo by [Voice + Video](#) on [Unsplash](#)

Pop filters



Cost: low

Photo by [Kelly Sikkema](#) on [Unsplash](#)

Boom arm



Cost: low/med

Photo by [Ritupon Baishya](#) on [Unsplash](#)

XLR microphones



Cost: mid/high

Quality: v. good

Photos from [Wikimedia](#) and [Musik Productiv](#)

USB sound cards



Cost: low-high

Quality: v. good

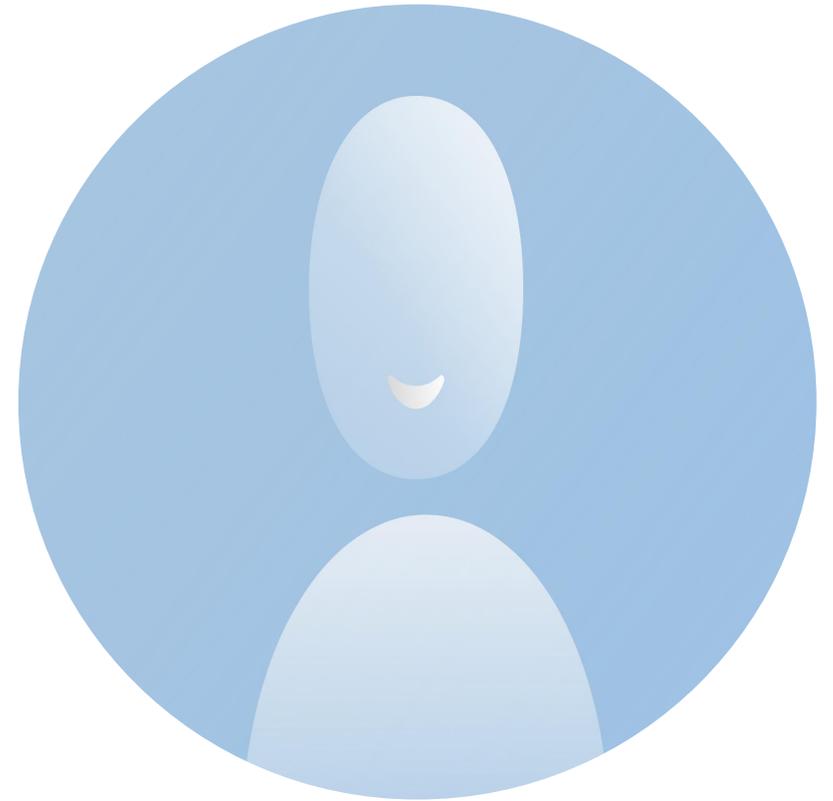
Photos from [Thomann](#)

USB sound cards – 48V “Phantom” Power

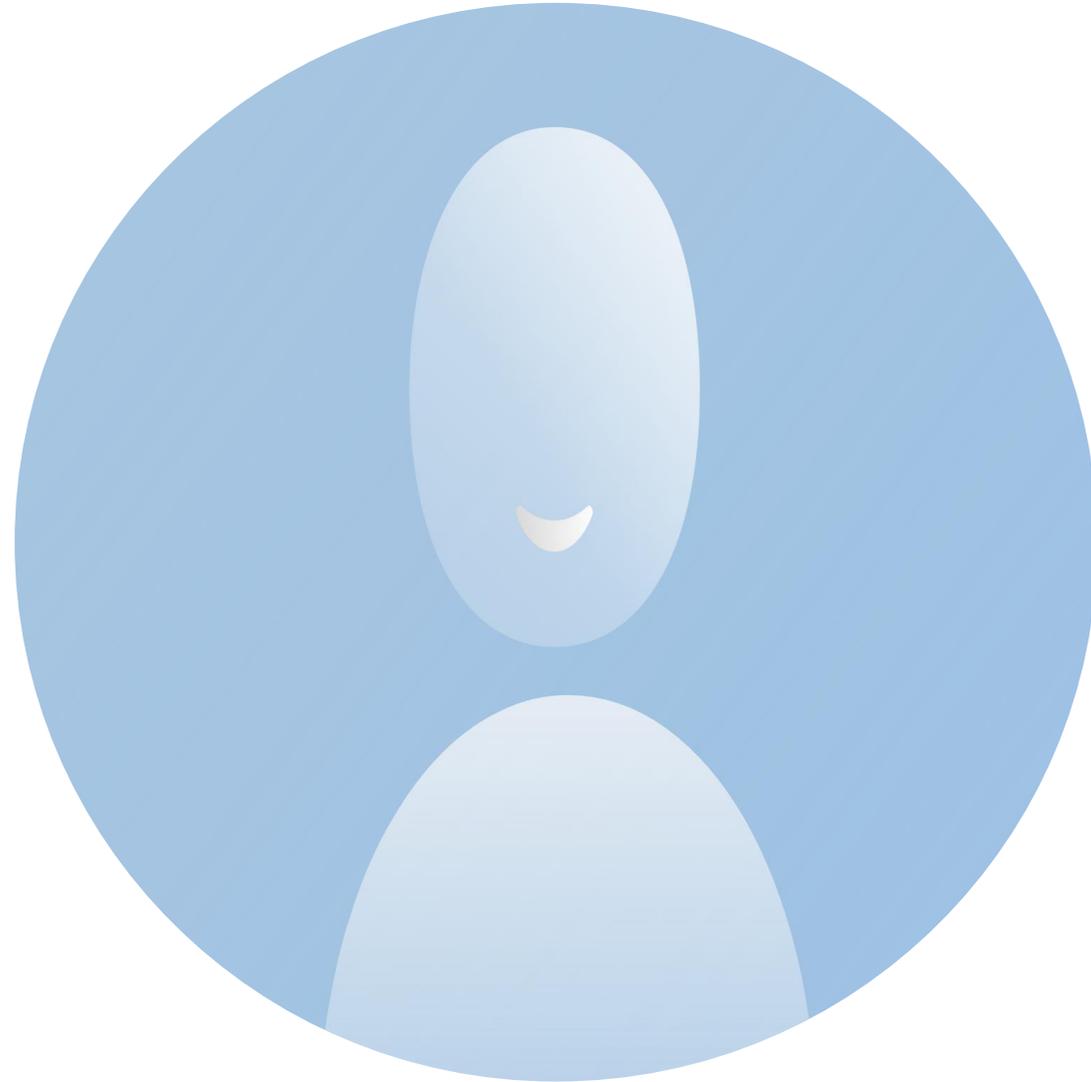


Video Basics

Overlay



Camera



Frequency

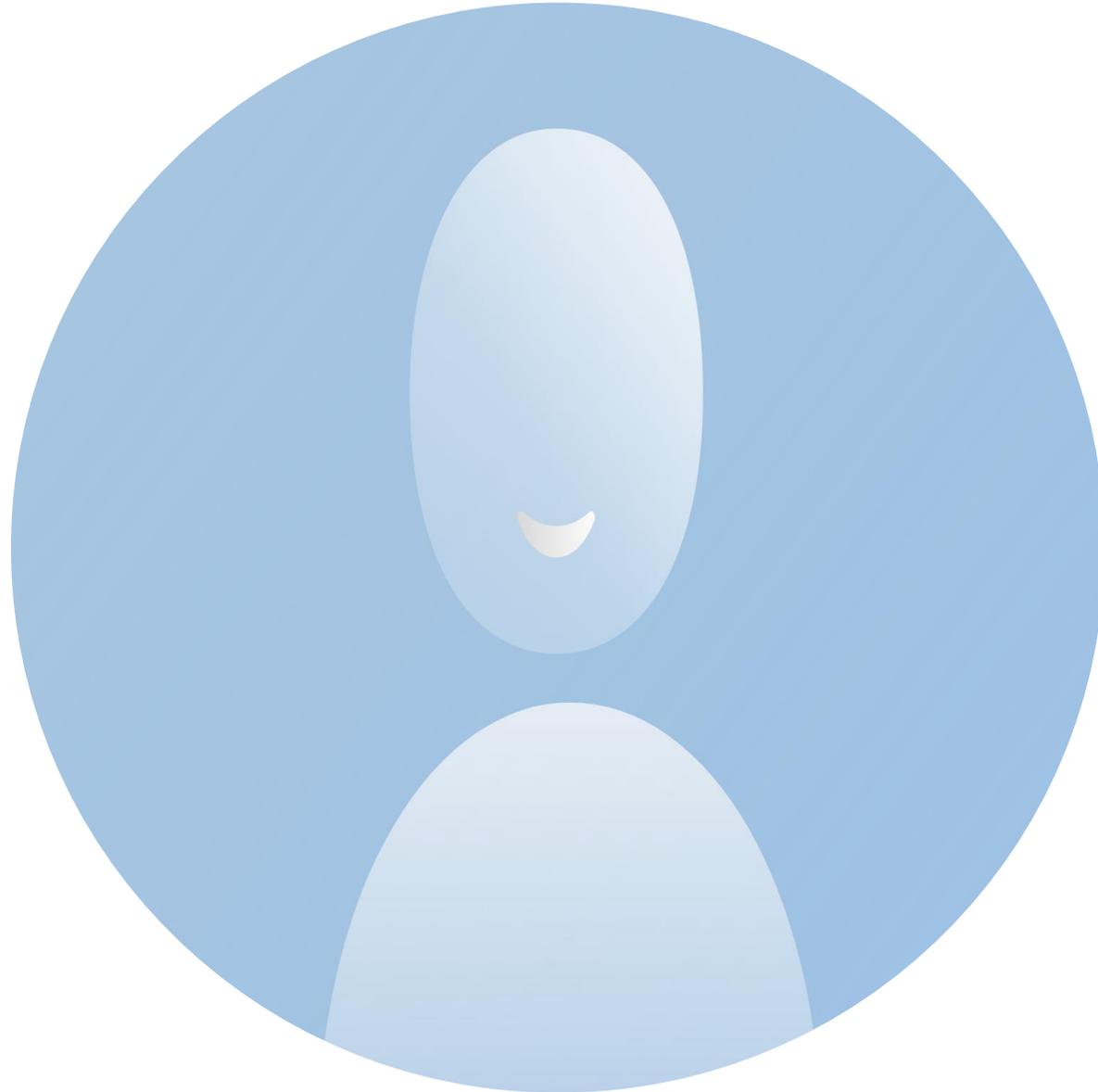
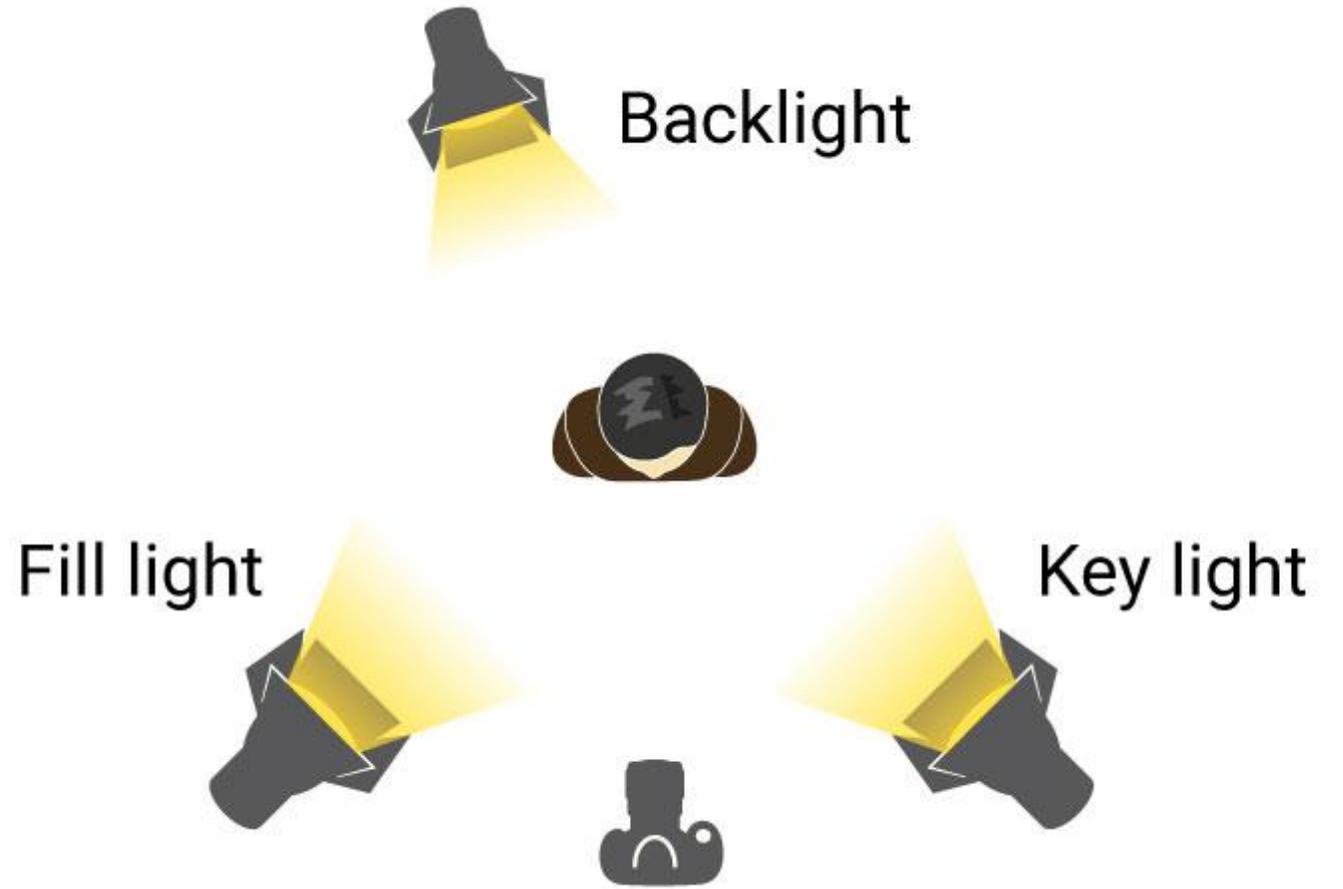




Photo by Creative Digital Eye on [YouTube](#)

Three-light Lighting



LIBRARIES

- All Events
- iMovie Library
 - 9-25-18

Leave room for subtitles!



Presentation Basics

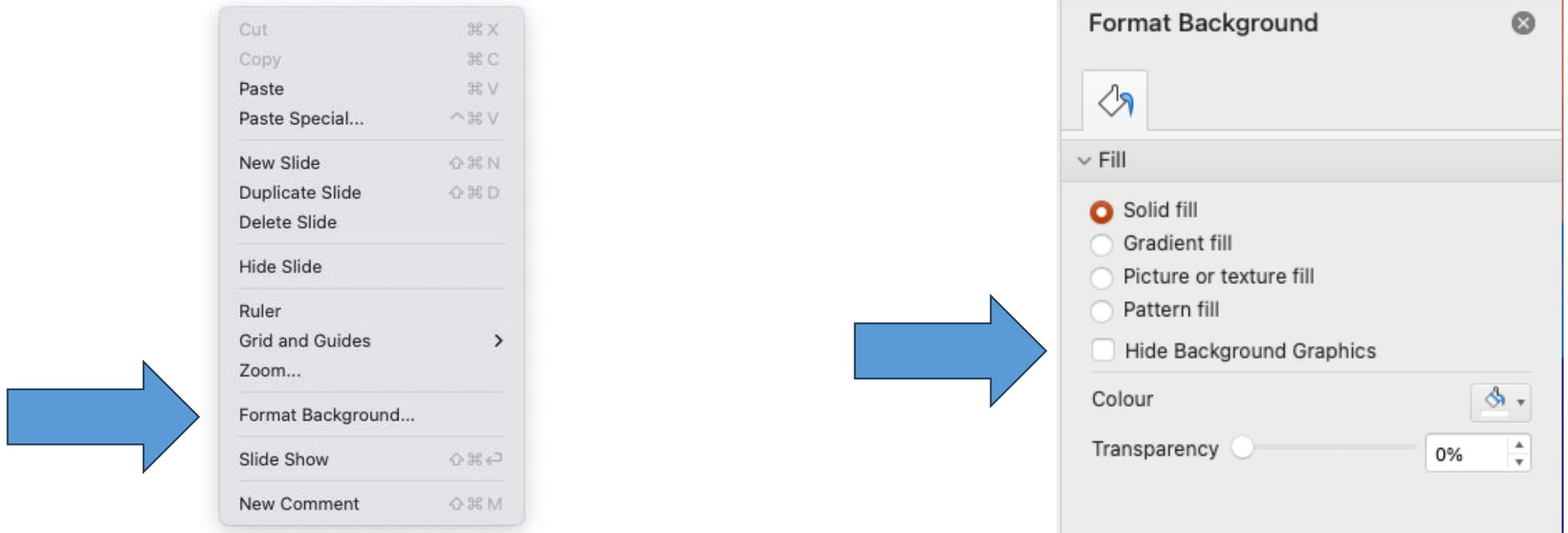
Things we love

- Look! A bulleted list!
- God, we all *really* love these
- Is there anything to be said for *more bullets?*

Oh god, too far!

- Another bulleted list? *Really?*
- I'm so boooooooooored....
- God, when will they ever end?
- Is he being paid by the bullet point?
- Would have *killed* him to use a picture or two?

Turning off Background Graphics



```
hostname$ command -f option1 -r option2
```

Output

More things that you can **highlight** if you need to

blah blah rhubarb rhubarb

Nobody reads this far down a slide, you know..

```
hostname$ command -f option1 -r option2
```

Output

More things that you can **highlight** if you need to

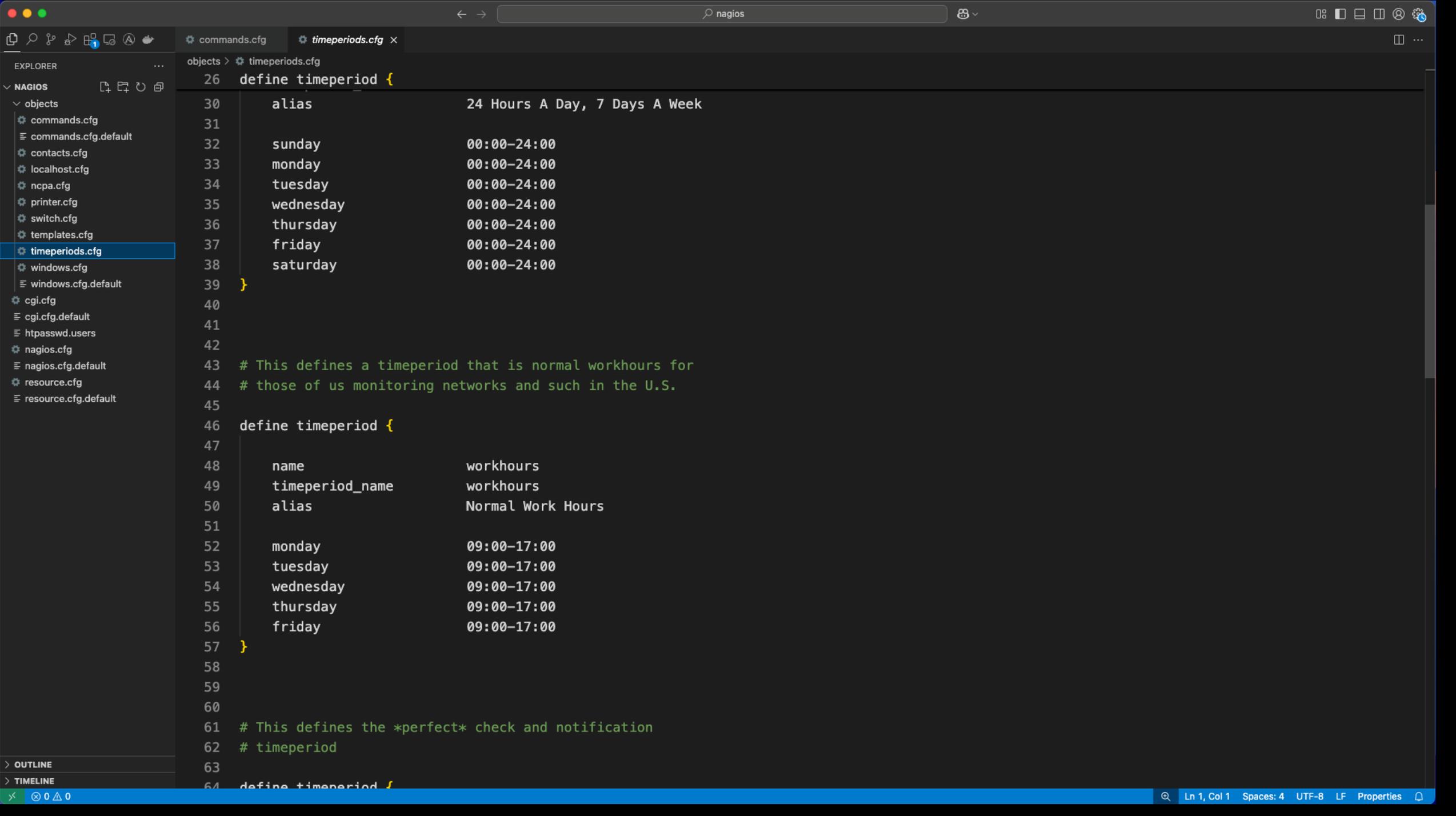
Blah blah blah blah

```
hostname$ command -f option1 -r option2
```

Output

More things that you can **highlight**

Blah blah blah blah



```
26 define timeperiod {
30     alias                24 Hours A Day, 7 Days A Week
31
32     sunday               00:00-24:00
33     monday               00:00-24:00
34     tuesday              00:00-24:00
35     wednesday            00:00-24:00
36     thursday             00:00-24:00
37     friday               00:00-24:00
38     saturday             00:00-24:00
39 }
40
41
42
43 # This defines a timeperiod that is normal workhours for
44 # those of us monitoring networks and such in the U.S.
45
46 define timeperiod {
47
48     name                  workhours
49     timeperiod_name       workhours
50     alias                 Normal Work Hours
51
52     monday                09:00-17:00
53     tuesday               09:00-17:00
54     wednesday             09:00-17:00
55     thursday              09:00-17:00
56     friday                09:00-17:00
57 }
58
59
60
61 # This defines the *perfect* check and notification
62 # timeperiod
63
64 define timeperiod {
```

Colour Palette

Primary



Teal is the lead primary colour, its neutrality providing a strong background for accent and secondary colours.

Crimson is the accent primary colour, its brightness providing a strong contrast to the teal and a lead for the secondary colours.

Secondary



The secondary colours have been selected to complement the primary colours. These secondary colours should be used sparingly and only used in addition to, and where they will not interfere with the primary colours.

Useful boxes

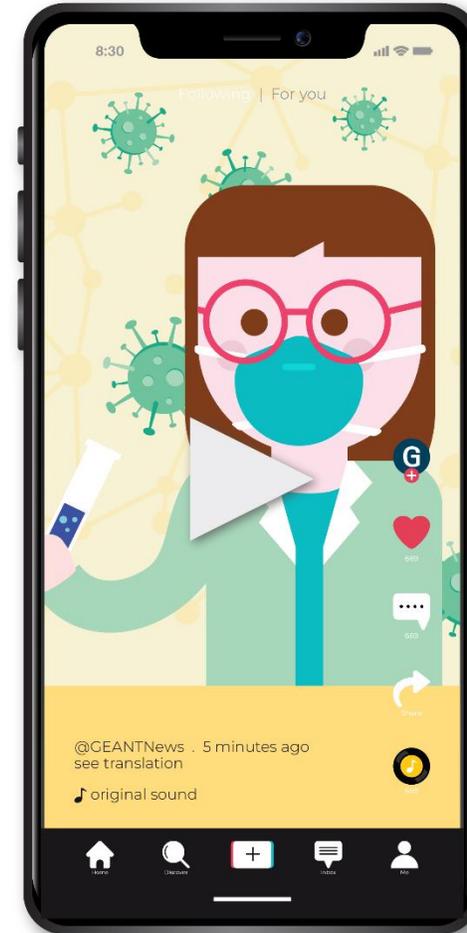
Keep text short

GÉANT – Supporting Science & Education in Europe

GÉANT Research Engagement:

- Dedicated single point-of-contact for large international collaborations
- Providing a one-stop-shop including technical consultancy

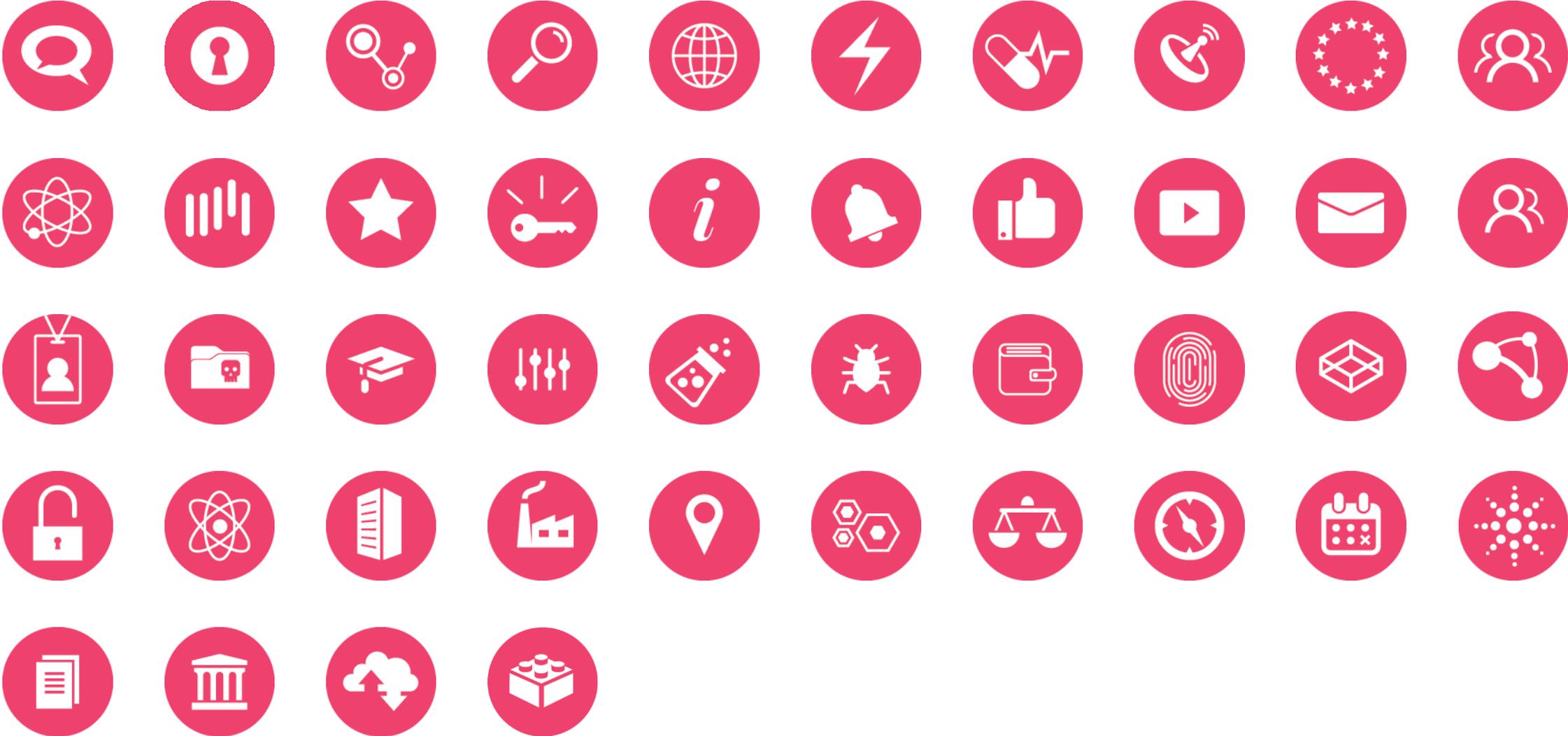
Ask the Design Team how to change pictures inside the phones!



impact.geant.org



Icon Set



Typography

Slide Titles = 28pt Bold

Sentences = 24pt Regular

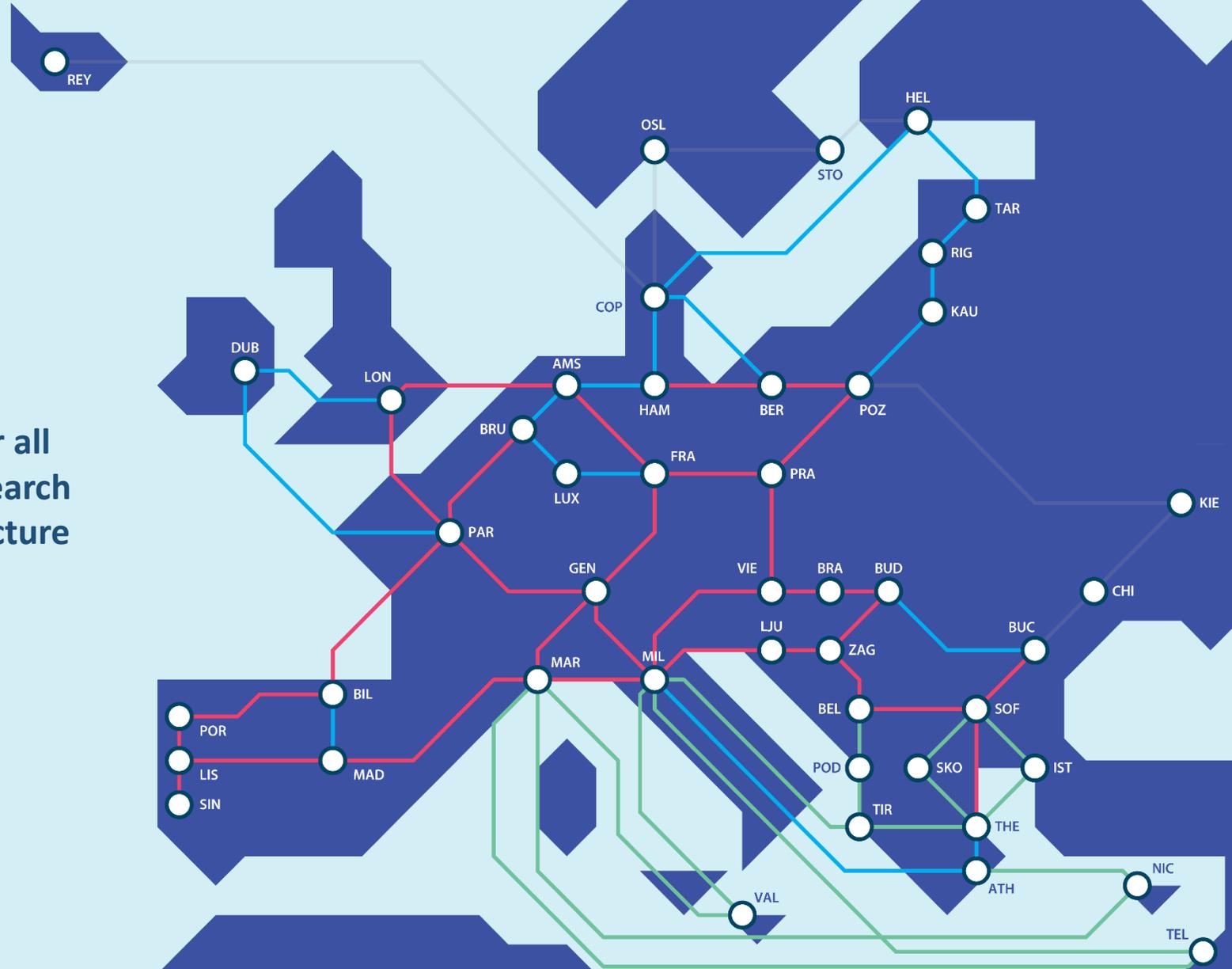
Paragraphs = 18pt Regular (never less)

Captions = 14pt Regular



GÉANT Vision

To ensure equal network access for all scientists across Europe to the research infrastructures and the e-infrastructure resources available to them



Alt Text



Format Picture

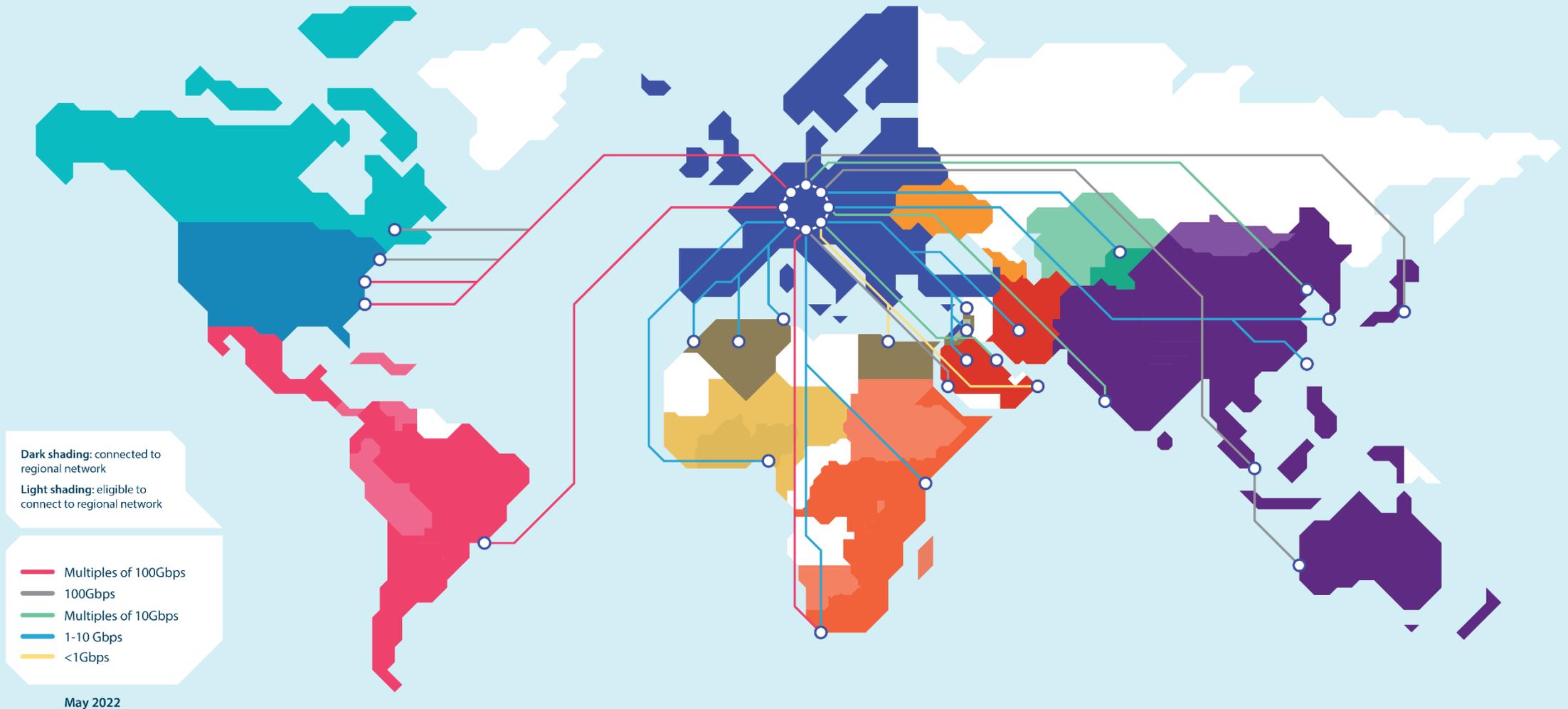
How would you describe this object and its context to someone who is blind or low vision?

- The subject(s) in detail
- The setting
- The actions or interactions
- Other relevant information

(1-2 detailed sentences recommended)

A map of Europe shows cities as white circles and the links between them as coloured lines. The text of the GÉANT vision statement is in a clear area to the left.

At the heart of global research and education networking



Speaker Notes

- Use **bold**, *italic* and sometimes ***both***
- They are your handouts...
 - ...and your script!

Things *NOT* to do

- **READ YOUR SLIDES ALOUD!**
 - Slides are there to **support** what you're saying...
 - ...not to replicate it
- Eh, good enough
 - It'll be *grand...*
 - ...so it will

Things *NOT* do - part deux

- SpeakVeryQuickly...
 - ...orrhrrrrrr tttttooooo sssllloooowwwllllyyyy
- ...or have *the most boring voice in Ireland*
 - *Why not both?*

~~For Your Consideration~~

“Considerations about the training for GN5-2”

<https://wiki.geant.org/display/gn43wp6/Considerations+about+the+training+for+GN5-2>

Please read it all!

- How to lay out the course in Moodle
- How to use the GN5-2 slide template
- Tips for PowerPoint, Kazam, Zoom and OBS
 - I did a separate video on OBS if you're interested

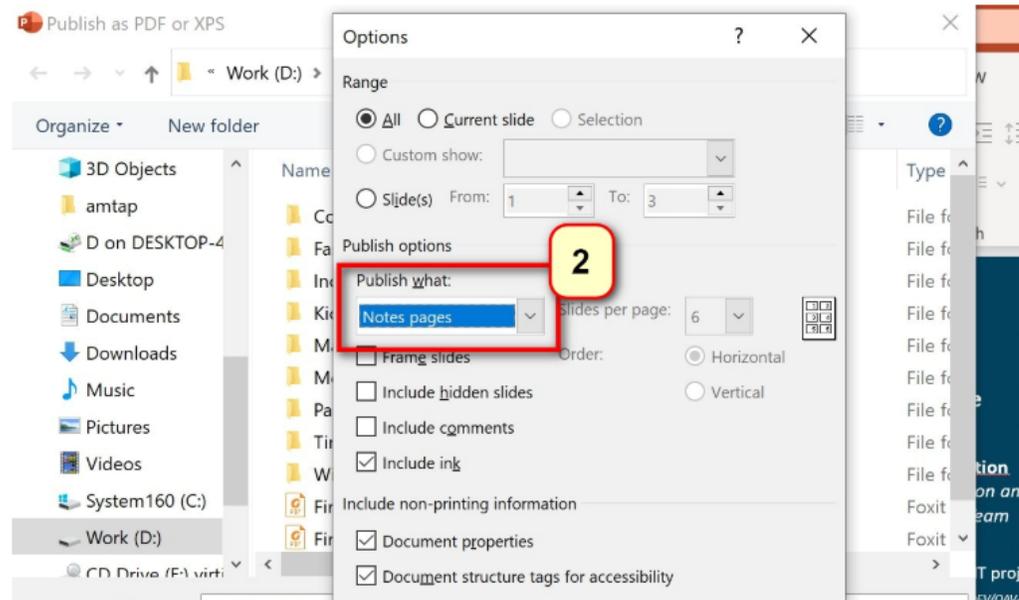
Highlights

- Use NREN examples where possible
- Split longer videos into shorter, 5-to-10-minute ones
- Use links for external content

- Network eAcademy Se
- OAV Architecture Map
- OAV Maturity Model Gl
- OAV Terminology Doct
- Training GN5-2
 - Considerations abc
 - How to publish a uni
- GLAD-Training VC M
- Network eAcademy |
- Network Automation
- OTFN eAcademy GN
- Quantum eAcademy
- eAcademy Units Rev
- Data Analysis GN5-2
- NETDEV Wiki - Interna
- VC Minutes GN5-2 WF
- GN5-2 WP6 T4 RAG R

How to save presentation with comments and working Links on slides:

In PowerPoint select "File" → "Export"
Click on "Create PDF/XPS" button



How to use the eAcademy Moodle

Manage course categories and courses

Course categories

Create new category

<input type="checkbox"/> + Professional Competencies			1
<input type="checkbox"/> - Technical skills			2
<input type="checkbox"/> Trust and Identity	0005		4
<input type="checkbox"/> - Network	0003		0
<input type="checkbox"/> Network Automation eAcademy			41
<input type="checkbox"/> Operational network security			1
<input type="checkbox"/> Network Automation Development			33
<input type="checkbox"/> Quantum Technology			6
<input type="checkbox"/> Quantum Development			36
<input type="checkbox"/> Time and Frequency Networks			5
<input type="checkbox"/> Time and Frequency Networks Development			7

The image shows a user interface header with a dark blue background. On the left side, there is a white notification bell icon, a circular profile picture of a man, and a small dark brown dropdown arrow. To the right of these elements, the text "Edit mode" is displayed in white, followed by a white toggle switch. Below the header, there are two solid orange horizontal bars, and the bottom section of the interface is a light blue gradient area.

Ansible

Course

Settings

Participants

Grades

Reports

More ▾

OVERVIEW

I - Settings, Inventory, Module Basics

II - Playbooks, Variables and Modules

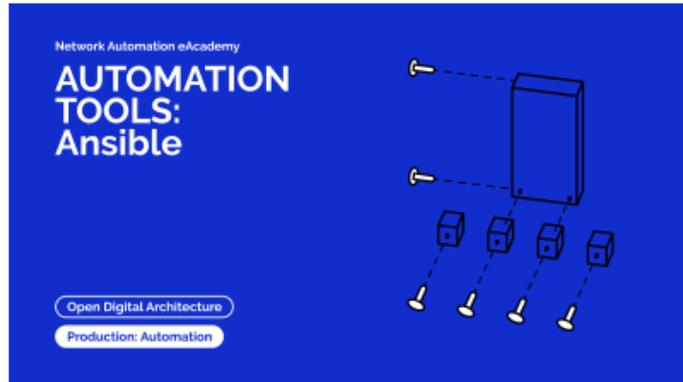
III - How people use Ansible, Loops, ...

IV - Playbook Validation, Vault, Roles...

Test environments and Useful Links

Feedback and Completion Certificate

Welcome to the Course: Ansible



COURSE DATE:

On Demand

DURATION:

60 minutes

COMMITMENT:

60 minutes + lab time

REQUIREMENT:

YAML Learning Module

COURSE TYPE:

Self-paced

CREDENTIAL:

Certificate

Ansible

Course

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More ▾

OVERVIEW

I - Settings, Inventory, Module Basics

II - Playbooks, Variables and Modules

III - How people use Ansible, Loops, ...

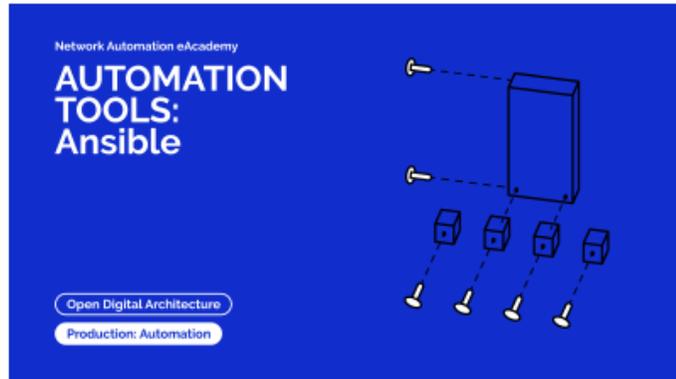
IV - Playbook Validation, Vault, Roles...

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OVERVIEW

Topic 1

I - Settings, Inventory, Module Basics

II - Playbooks, Variables and Modules

III - How people use Ansible, Loops, ...

IV - Playbook Validation, Vault, Roles...

Test environments and Useful Links

Feedback and Completion Certificate



Add an activity or resource

◀ OVERVIEW

Jump to...



I - Settings, Inventory, Module Basics ▶

Ansible

Course

Settings

Participants

Grades

Reports

More ▾

OVERVIEW

I - Settings, Inventory, Module Basics

Topic 2

II - Playbooks, Variables and Modules

III - How people use Ansible, Loops, ...

IV - Playbook Validation, Vault, Roles...

Test environments and Useful Links

Feedback and Completion Certificate



Add an activity or resource



- Edit section
- Highlight
- Duplicate
- Move left
- Move right
- Hide topic
- Delete section

◀ I - Settings, Inventory, Module Basics

Jump to...



II - Playbooks,

Ansible

[Course](#) [Settings](#) [Participants](#) [Grades](#) [Reports](#) [More](#) ▾

Summary of Topic 2

▾ General

Section name

Custom

Topic 2

Summary



Level



Normal, as a first level tab ▾

Text of the first tab in sublevel



Index

Summary of Shiny Example

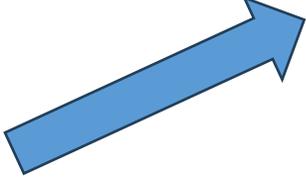
General

Section name

Custom

Dónal's example

Summary



Rich text editor toolbar with icons for undo, font size, bold, italic, bulleted list, numbered list, link, unlink, smiley, image, video, microphone, camera, H-P, and social media icons.

The Summary appears at the top of the page. You can put links and pictures in here too!

Summary of Shiny Example

General

Section name

Custom

Dónal's example

Summary

Rich text editor toolbar with icons for bold, italic, list, link, image, video, and code. A red arrow points to the code icon.

The Summary appears at the top of the page. You can put links and pictures in here.

Level

Normal as a first level tab



```
1 <h2>Welcome!</h2>
2
3 <p dir="ltr" style="text-align: left;">The Summary appears at the top of the page.
4
5     You can put <a href="http://www.heanet.ie/">links</a> and pictures in here too!</p>
6 <hr>
7 <h2>Something deep and meaningful</h2>
8
9 <p>
10     <quote>"Life is pain, Majesty.
11         Anyone who says otherwise is <em>trying to sell you something.</em>"
12         |         - Count Rugen</quote>
13 </p>
```

Ansible

Course

Settings

Participants

Grades

Reports

More ▾

OVERVIEW

I - Settings, Inventory, Module Basics

Dónal's example

II - Playbooks, Variables and Modules

III - How people use Ansible, Loops, ...

IV - Playbook Validation, Vault, Roles...

Test environments and Useful Links

Feedback and Completion Certificate



The Summary appears at the top of the page. You can put links and pictures in here too!



Add an activity or resource

◀ I - Settings, Inventory, Module Basics

Jump to...



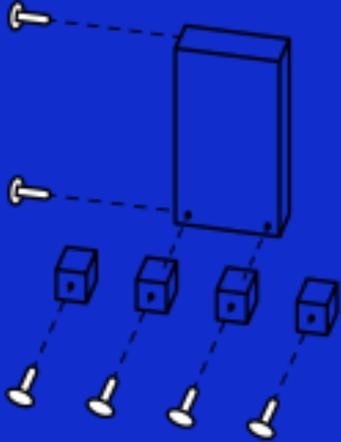
II - Playbooks, Variables and Modules ▶



Welcome to the Course: Ansible

Network Automation eAcademy

AUTOMATION TOOLS: Ansible



Open Digital Architecture

Production: Automation



COURSE DATE:

On Demand



REQUIREMENT:

Review steps

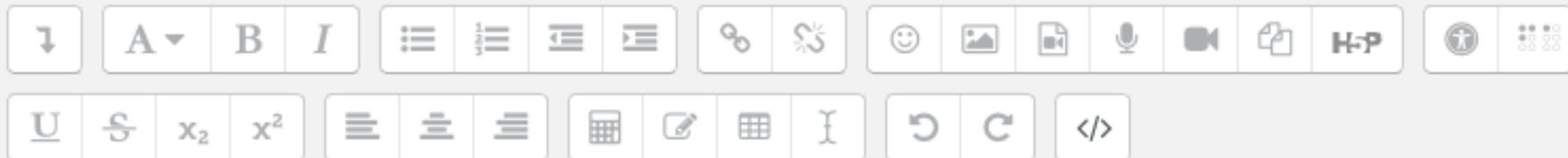
- Helper (Assigned by the team)
- Task leader/Sub-task leader (Maria Isabel and me)
- Technical Authors (Rebecca)
- Work Package Leader (Ivana & Pavle)

Subtitling

- This is why we leave the bottom quarter of the screen blank!

`https://youtu.be/sCwyxXiWlmI`

`https://www.youtube.com/embed/sCwyxXiWlmI`



```
7 </p></p>
8 <p>
9 <iframe
10 src="https://www.youtube.com/embed/sCwyxXiWlmI"
11
12 allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture"
13 allowfullscreen="" width="960" height="540" frameborder="0"
14 style="text-align: center; font-family: -apple-system, BlinkMacSystemFont,
15 'Segoe UI', Roboto,
16 'Helvetica Neue', Arial, 'Noto Sans', sans-serif, 'Apple Color Emoji',
17 'Segoe UI Emoji', 'Segoe UI Symbol', 'Noto Color Emoji'; font-size: 1rem;">
18 </iframe>
19 </p>
20
```



FILE

Ansible section I - slides and speaker notes 

PDF document



Add an activity or resource

Add an activity or resource



Search

All

Activities

Resources



Assignment



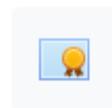
Book



Chat



Choice



Custom
certificate



Database



External tool



Feedback



File



Folder



Forum



Glossary



▼ General

Name



Ansible section I - slides and speaker notes

Description

A rich text editor toolbar with various icons for text formatting (bold, italic, underline, strikethrough), alignment, and media insertion (image, video, audio). The text area below the toolbar is currently empty.

Display description on course page [?](#)

Select files

Maximum size for new files: 50 MB

A file manager interface with a toolbar at the top containing icons for file operations (upload, folder, download) and view options (grid, list, folder). Below the toolbar, a folder named "Files" is shown, containing a single PDF file with a red icon and the name "Ansible mo...".



Thank You

network-eacademy@lists.geant.org

www.geant.org



Co-funded by
the European Union