The EoCoE Project
HPC for Energy Applications

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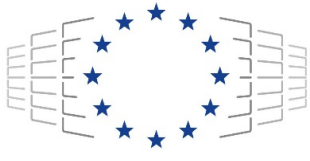
F2F Meeting - BSC, Barcellona, November 27, 2024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Joint Undertaking

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The EoCoE Beamer theme

Examples of usage and various commands

The information on the title page are inserted with the following commands:

```
\title{The EoCoE Project}
\subtitle{HPC for Energy Applications}
\date[F2F]{F2F Meeting - BSC, Barcellona, November 27, 2024}
\author[Fabio]{Fabio Durastante}
\institute{Università di Pisa}
\email{fabio.durastante@unipi.it}
\web{fdurastante.github.io}
```

Then the title slide is inserted with the command:

```
\titlepage
```

on a slide that has the `[plain]` option switched on.

Blocks

Example of standard block

This is a standard block.

Example of an alert block

This is an alert block.

This is an example of an example block

This is an example block.

Figures

Figures can be inserted as usual

```
\begin{center}
\includegraphics[width=3cm]{assets/eocoe-logo}
\end{center}
```

. . . and tables

Standard tables that use the commands from the `booktabs` package, i.e., `\toprule`, `\midrule` or `\bottomrule`:

Rank	System Name	Cores	Rmax (PFlop/s)	Power (kW)
1	Frontier	8,699,904	1,206.00	22,786
2	Aurora	9,264,128	1,012.00	38,698
3	Eagle	2,073,600	561.20	N/A
4	Fugaku	7,630,848	442.01	29,899

. . . and tables

Standard tables that use the commands from the `booktabs` package, i.e., `\toprule`, `\midrule` or `\bottomrule`, or with colored rows `\rowcolor{eocoe_yellow}`

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. . . and tables

Standard tables that use the commands from the `booktabs` package, i.e., `\toprule`, `\midrule` or `\bottomrule`, or with colored rows `\rowcolor{eocoe_yellow}` or columns `\newcolumntype{g}{>{\columncolor{eocoe_green}}c}`

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Code

The ‘minted‘ package allows you to include source code in your LaTeXdocument with syntax highlighting.

- Supports a variety of programming languages.
- Provides customizable syntax highlighting using Pygments.
- Easily integrates with Beamer presentations and other LaTeX documents.

Basic Usage of Minted

To use the ‘minted‘ package, follow these steps:

1. Include the ‘minted‘ package in the preamble:

```
\usepackage{minted}
```

2. Use the `minted` environment to include code.

```
\begin{minted}{python}
 print("Hello, world!")
\end{minted}
```

3. Compile the document with `-shell-escape` to enable external programs like Pygments.

Example of Python Code

Here is an example of Python code using the ‘minted‘ environment:

```
def greet():
    print("Hello, world!")
    greet()
```

Compiling with Shell Escape

For the ‘minted‘ package to work, you must compile your document with the ‘–shell-escape‘ flag enabled. For example:

```
pdflatex --shell-escape yourfile.tex
```

This allows LaTeX to run external programs (like Pygments) for syntax highlighting.

Customizing Syntax Highlighting

You can customize the appearance of the code in several ways:

- Change the theme of the syntax highlighting using the `bg` (background) and `fg` (foreground) options.
- Use `linenos` to add line numbers to the code.
- Specify language-specific options, like ‘python3‘ or ‘java‘.

Example:

```
\begin{minted}[bg=lightgray, linenos]{python}
def add(a, b):
 return a + b
\end{minted}
```

Conclusion

The ‘minted‘ package provides a powerful and flexible way to include code with syntax highlighting in your LaTeX documents. Remember:

- Ensure you use the ‘–shell-escape‘ flag during compilation.
- Customize the highlighting with various options to match your needs.
- Supported languages are extensive thanks to Pygments.

The EoCoE Project

Thank you for listening!
Any questions?