

# ITT3 SS special subjects

SS1 VMware ESXi

Contact:  
Morten Nielsen <mon@eal.dk>

2018--09--11

# Contents

|          |  |          |
|----------|--|----------|
| <b>1</b> | <b>Project outline</b>                 | <b>1</b> |
| <b>2</b> | <b>Week 34 SS1 startup and work</b>    | <b>1</b> |
| 2.1      | Goals of the week(s) . . . . .         | 1        |
| 2.1.1    | Practical goals . . . . .              | 1        |
| 2.1.2    | Learning goals . . . . .               | 1        |
| 2.2      | Deliverable . . . . .                  | 1        |
| 2.3      | Comments . . . . .                     | 1        |
| <b>3</b> | <b>Week 35 SS1 startup and work</b>    | <b>2</b> |
| 3.1      | Goals of the week(s) . . . . .         | 2        |
| 3.1.1    | Practical goals . . . . .              | 2        |
| 3.1.2    | Learning goals . . . . .               | 2        |
| 3.2      | Deliverable . . . . .                  | 2        |
| 3.3      | Comments . . . . .                     | 2        |
| <b>4</b> | <b>Week 36 SS1 VMware subproject 1</b> | <b>2</b> |
| 4.1      | Goals of the week(s) . . . . .         | 2        |
| 4.1.1    | Practical goals . . . . .              | 2        |
| 4.1.2    | Learning goals . . . . .               | 2        |
| 4.2      | Deliverable . . . . .                  | 3        |
| 4.3      | Comments . . . . .                     | 3        |
| <b>5</b> | <b>Week 37 SS1 VMware subproject 2</b> | <b>3</b> |
| 5.1      | Goals of the week(s) . . . . .         | 3        |
| 5.1.1    | Practical goals . . . . .              | 3        |
| 5.1.2    | Learning goals . . . . .               | 3        |
| 5.2      | Deliverable . . . . .                  | 3        |
| 5.3      | Comments . . . . .                     | 3        |
| <b>6</b> | <b>Week 38 SS1 VMware subproject 3</b> | <b>3</b> |
| 6.1      | Goals of the week(s) . . . . .         | 3        |
| 6.1.1    | Practical goals . . . . .              | 4        |
| 6.1.2    | Learning goals . . . . .               | 4        |
| 6.2      | Deliverable . . . . .                  | 4        |
| 6.3      | Comments . . . . .                     | 4        |
| <b>7</b> | <b>Mandatory elements</b>              | <b>4</b> |
| <b>8</b> | <b>End-of-SS report</b>                | <b>4</b> |

# 1 Project outline

You have already worked with virtualization and virtual machines.

Outline of the 5 weeks

- Week 34: Start project, form groups, get access, built an overview, decide on a HLD.
- Week 35: Initial setup
- Week 36: Subproject 1
- Week 37: Subproject 2
- Week 38: Subproject 3

## 2 Week 34 SS1 startup and work

### 2.1 Goals of the week(s)

Practical and learning goals for the period is as follows

#### 2.1.1 Practical goals

- Groups have been formed
- gitlab projects have been created
- milestones and tasks have been defined
- Online resources have been located.

#### 2.1.2 Learning goals

- Consolidation of prior skills and competences

### 2.2 Deliverable

- Presentations and meetings as defined in the project plan

### 2.3 Comments

- MON and others are at Bornhack. PDA will run the show.

## 3 Week 35 SS1 startup and work

### 3.1 Goals of the week(s)

Practical and learning goals for the period is as follows

#### 3.1.1 Practical goals

- ESXi have been installed is functioning

#### 3.1.2 Learning goals

- VMware
  - Level 1: Install virtual machines on an ESXi
  - Level 2: Install ESXi with virtual machines
  - Level 3: Install and configure ESXi with multiple virtual machines
- Consolidation of documentation, test and project management skills

### 3.2 Deliverable

- Presentations and meetings as defined in the project plan

### 3.3 Comments

- MON have added an AMA box for whatever questions you may have.
- When this week is done, we expect you to have a clear idea of what you are trying to achieve in SS1.

## 4 Week 36 SS1 VMware subproject 1

### 4.1 Goals of the week(s)

Practical and learning goals for the period is as follows

#### 4.1.1 Practical goals

- None

#### 4.1.2 Learning goals

- You decide on this. Suggested are related to ESXi and networking.
- Consolidation of documentation, test and project management skills

## 4.2 Deliverable

- Suggested is to set up a multi-VM and multi-subnet system with vSRX as a virtual router
- Presentations and meetings as defined in the project plan

## 4.3 Comments

- You will have to define the details for yourself. Suggestions are just suggestions.

# 5 Week 37 SS1 VMware subproject 2

## 5.1 Goals of the week(s)

Practical and learning goals for the period is as follows

### 5.1.1 Practical goals

- None

### 5.1.2 Learning goals

- You decide on this. Suggested are related to ESXi and online storage or monitoring
- Consolidation of documentation, test and project management skills

## 5.2 Deliverable

- Suggested is to set up a windows server on an iSCSI share or setup monitoring of the ESXi instance
- Presentations and meetings as defined in the project plan

## 5.3 Comments

- You will have to define the details for yourself. Suggestions are just suggestions.

# 6 Week 38 SS1 VMware subproject 3

## 6.1 Goals of the week(s)

Practical and learning goals for the period is as follows

### 6.1.1 Practical goals

- None

### 6.1.2 Learning goals

- You decide on this. Suggested are related to ESXi and vMotion
- Consolidation of documentation, test and project management skills

## 6.2 Deliverable

- Suggested is to set up a windows server on an iSCSI share or setup monitoring of the ESXi instance
- Presentations and meetings as defined in the project plan
- Final report for SS1 are to be handed in next week

## 6.3 Comments

- You will have to define the details for yourself. Suggestions are just suggestions.
- MON absent on Friday Sep 21st

## 7 Mandatory elements

To help keep you on track, and to maintain an appropriate level of teacher contact, there are some mandatory elements.

- All weeks will include presentations on class.

This is a presentation with the class as *audience* and you must have decided in advance the *purpose* of the presentation

- Project management

You will create a gitlab project for project management and for configurations.

Remember to invite the teachers.

- All weeks will include a meeting with the teacher(s)

This is a 10-15 minute meeting, where you present status on tasks and milestones, and if you have specific questions

## 8 End-of-SS report

Each SS ends with a report hand-in. The report must document, that the student is able to:

- Document a project or process

- Learn new skills and/or gain new knowledge
- Explain technical or other relevant material within a given context
- Present technical or other relevant material within a given context
- Do structured project management

The report will includes links and references to relevant material, either online links or appendices. The former is preferred.

Since Gitlab is used for SS, links to gitlab resources like design documents, tests and more may be relevant.