



## Försättsblad Prov Original

Kurskod	Provkod	Tentamensdatum
D T 1 4 9 G	T 1 0 5	2 0 2 4 - 0 8 - 2 7
Kursnamn	DataTeknik GR (B), Administration av UNIX-lika system	
Provnamn	Skriftlig tentamen	
Ort	Annan ort	
Termin		
Ämne		

**i**

# Instructions

Carefully read the questions before you start answering them. Note the time limit of the exam and plan your answers accordingly. Only answer the question. The questions are not sorted by difficulty. Clearly show which answer you are giving your solution to. Always motivate your answers and show your calculations.

If you want to attach something handwritten as a supplement to your answers, it is possible to write it on a special scanning paper. There is a unique seven-digit code under each question, it should be noted in the upper left corner of the pass-scan paper. Each number must also fill in the corresponding circle below the code. Use blue, black ink pen or pencil. There is scratch paper in the hall if needed.

- **Time** 5 hours.
- **Exam Aids** Dictionary, Pen and Paper
- **Maximum points** 30
- **Questions** 10

## Preliminary grades

The following grading criteria applies:

**$E \geq 30\%$ ,  $D \geq 45\%$ ,  $C \geq 60\%$ ,  $B \geq 75\%$ ,  $A \geq 90\%$ .**

Scoring will be based on level of depth shown in your answer. **To pass this exam you must have shown proficient knowledge in all the intended learning outcomes (ILO) covered in this exam.**

Each questions ILO affiliation is shown as (ILO: #). The grade limit given is preliminary per ILO. Final grade is set based on your performance on each individual ILO.

## Covered ILO

This exam covers the following Intended Learning Outcomes (ILO)

- ILO: 1 – Administer and modify a UNIX-like system and its services
- ILO: 2 – Identify, implement and motivate choice of services
- ILO: 3 – Describe how the upstart process works in a UNIX-like system

## Contact Information

### For questions regarding the exam

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or call service center at 010-142 80 00

- 1 (ILO: 1) Your new server is up and running in production. You realized though that you forgot to add a vital security patch to the kernel. However you do not want to restart your server right now, since the company's web site is highly visited at the moment. You do know that at 01:00 in the night no one visits your site.

How can you make sure that the server will restart this time tonight without having to work late.

## **Skriv in ditt svar här**

Totalpoäng: 3

**Bifoga ritning till ditt svar?**  
Använd följande kod:

XXXXXXXXXX

- 2** (ILO: 1) Permissions are a very intricate part of file access in UNIX-like systems. To change the permissions on a file, you commonly use the command *chmod* followed by the desired permission.  
You can set the permission using both numerals or letters. Explain how they correlate to each other.

## **Skriv in ditt svar här**

Totalpoäng: 3

**Bifoga ritning till ditt svar?**  
Använd följande kod:

XXXXXX

**3** (ILO: 1) Name at least six usable terminal commands. Give usage examples.

## **Skriv in ditt svar här**

Totalpoäng: 3

## **Bifoga ritning till ditt svar?**

Använd följande kod:

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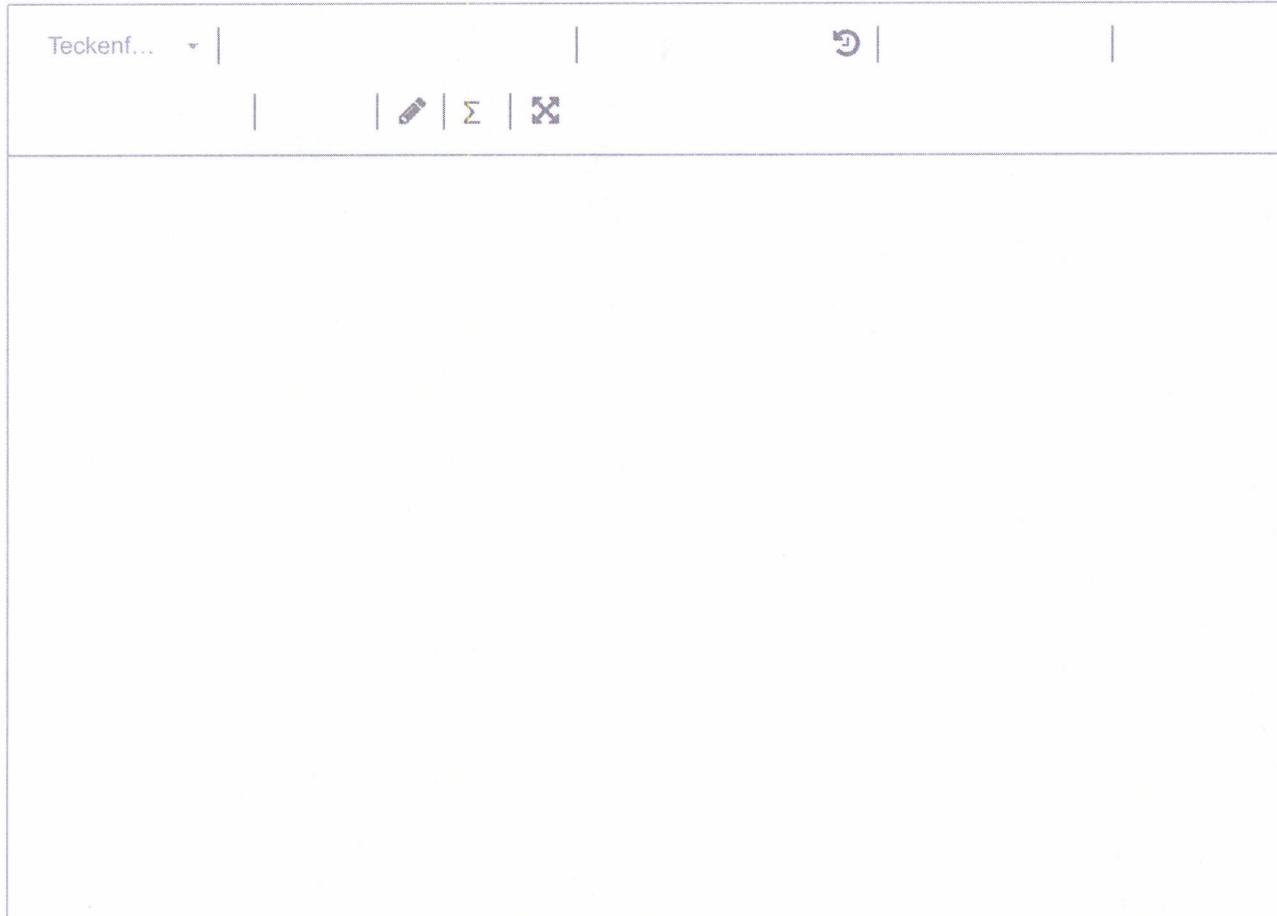
- 4 (ILO: 2) In this course, you worked with various FTP-servers, NFS and SAMBA/CIFS. Compare the three different types of file sharing services. Your explanation should also include recommended usage examples.

**Skriv in ditt svar här**

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| | | | |

Ord: 0



Totalpoäng: 3

**Bifoga ritning till ditt svar?**  
Använd följande kod:

**X X X X X X X**

- 5 (ILO: 2) Reason about syslog. How does it work, what are some good qualities with this style of log managing, and what problems can it lead to?

## **Skriv in ditt svar här**

Totalpoäng: 3

## Bifoga ritning till ditt svar?

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- 6 (ILO: 2) Give detailed explanations how SPF and DKIM works, and what their purpose are.

**Skriv in ditt svar här**

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Ord: 0

Totalpoäng: 3

**Bifoga ritning till ditt svar?**

Använd följande kod:

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- 7 (ILO: 2) What is the purpose of having a stateful inspection enabled in the firewall? What are some downsides to it?

## **Skriv in ditt svar här**

Totalpoäng: 3

## **Bifoga ritning till ditt svar?**

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- 8 (ILO: 3) What is the purpose of the ramdisk in the boot process?

Skriv in ditt svar här

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Ord: 0

Totalpoäng: 3

Bifoga ritning till ditt svar?

Använd följande kod:

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- 9 (ILO: 3) What is the purpose of the commands nice and renice? Explain the difference. For each of the commands, give a scenario when using these are necessary. What limitations do these commands have?

## **Skriv in ditt svar här**

Ord: 0

Totalpoäng: 3

## Bifoga ritning till ditt svar? Använd följande kod:

XXXXXX

- 10 (ILO: 3) How would you go about to identify a process that is taking up too much resources, and instead of killing it, suspend it. If you later would like to start it up again, how will you achieve this?

**Skriv in ditt svar här**

Teckenf... ▾ | | | ↴ | |

| | | ✎ | Σ | ✖

Ord: 0

Totalpoäng: 3

**Bifoga ritning till ditt svar?**  
Använd följande kod:

**X X X X X X X**