

# SAS 9.2 käytännössä – nopeampaa sovelluskehitystä ja parempaa suorituskykyä

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# Sisältö

- ▶ Taustaa
  - ▶ Migraatio
- ▶ Hallintatyökalut sovelluskehityksen osana
- ▶ Sovelluskehitys
  - ▶ DI Studio
- ▶ Tehokkuusnäkökulmia



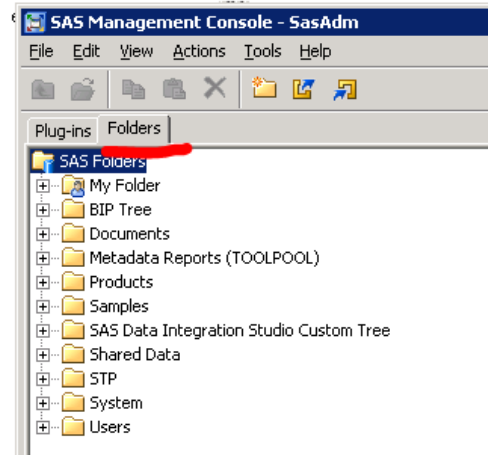
# Migraatio

- ▶ Valmistaudu huolella
- ▶ Lataa media
- ▶ LUE dokumentaatio
  - ▶ **SAS Intelligence Platform: 9.1.3 to 9.2 Migration Guide**
  - ▶ <http://support.sas.com/documentation/cdl/en/bimig/61696/HTML/default/titlepage.htm>
  - ▶ **SAS 9.2 Intelligence Platform: Installation and Configuration Guide**
  - ▶ <http://support.sas.com/documentation/cdl/en/biig/60946/HTML/default/titlepage.htm>
- ▶ Luo migraatiopaketti (migration utility), lue raportit
- ▶ Asenna JBoss, JDK, JRE
- ▶ (Aseta JAVA\_HOME-ympäristömuuttuja)
- ▶ Asenna ja konfiguroi
- ▶ Viimeistele tarvittavat konfiguroinnit

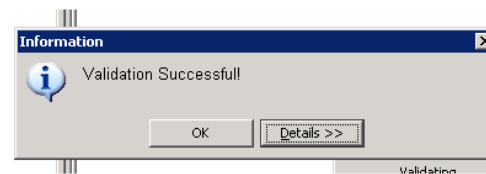
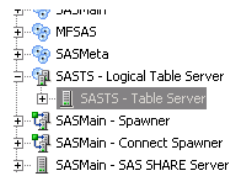


# Hallinta: SAS Management Console

- ▶ Kansiointi

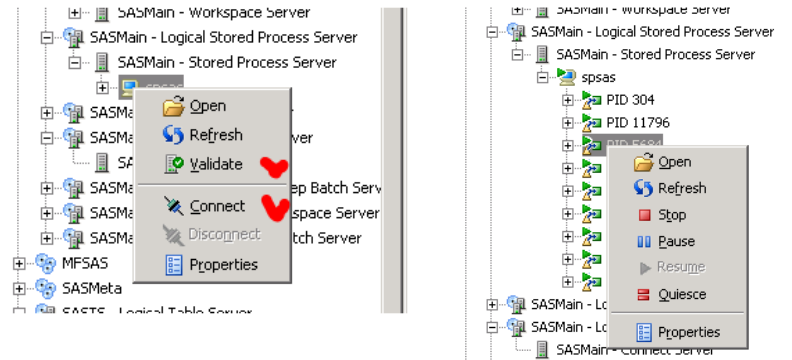


- ▶ Palvelujen validointi

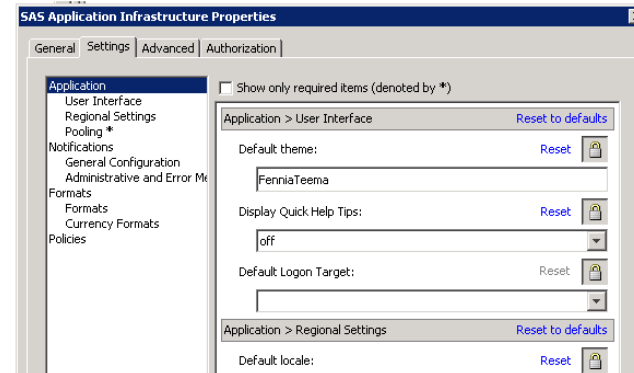
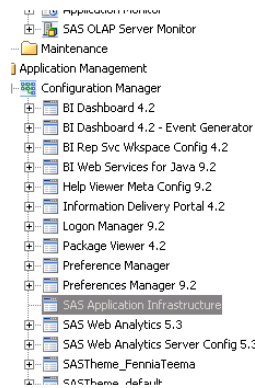
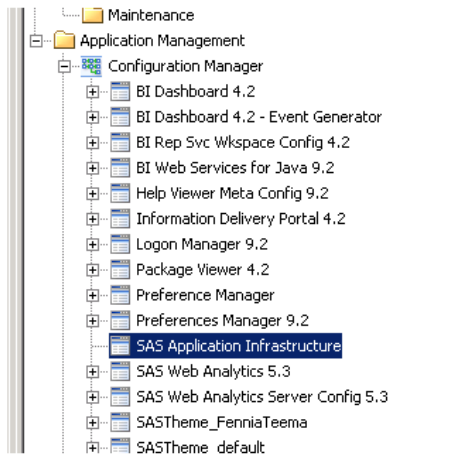


# Hallinta: SAS Management Console

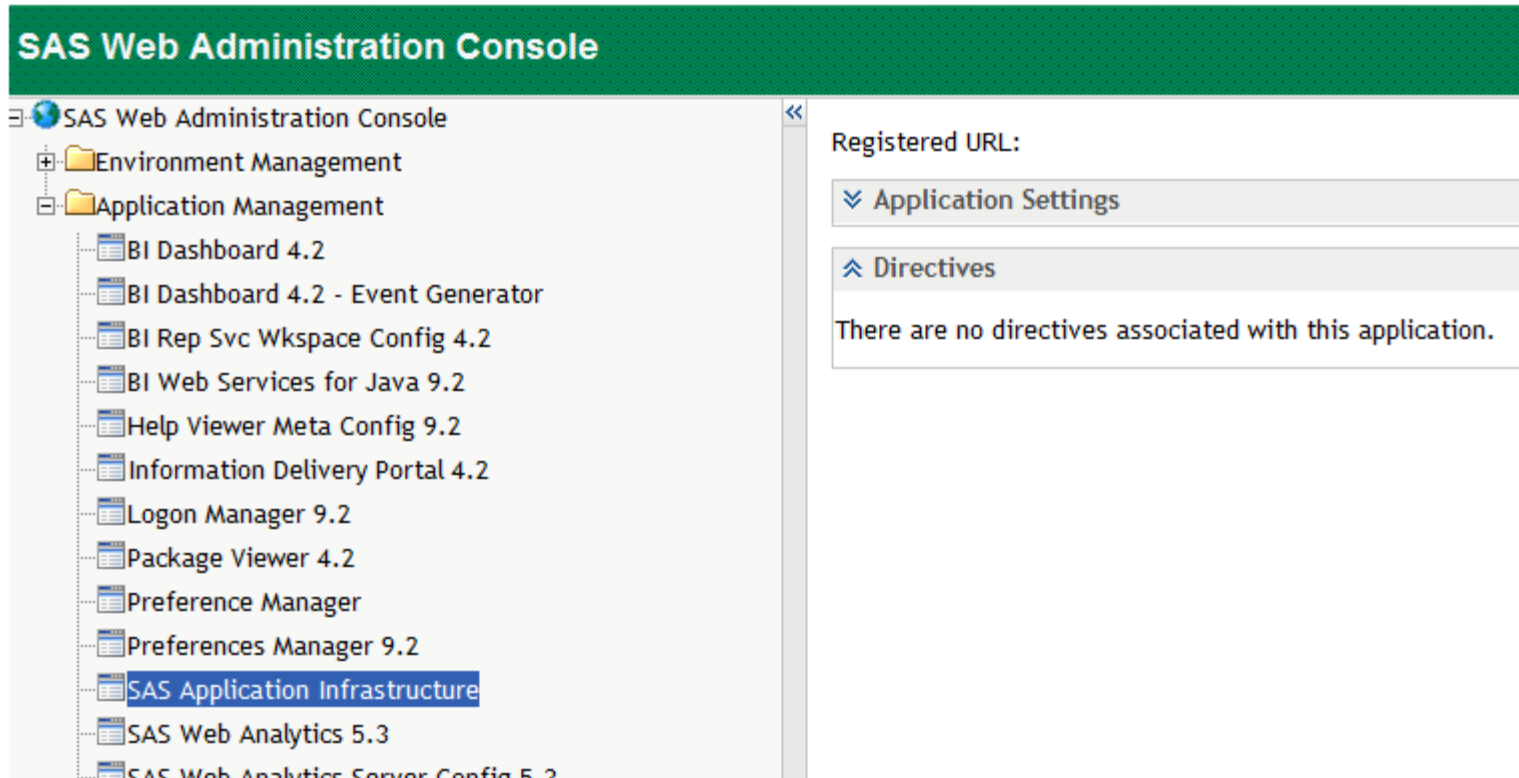
## ▶ Palvelun hallinta



## ▶ Application Management



# Hallinta: SAS Web Administration Console



The screenshot shows the SAS Web Administration Console interface. The title bar at the top is green with the text "SAS Web Administration Console". On the left side, there is a tree view with the following items:

- SAS Web Administration Console
  - Environment Management
  - Application Management
    - BI Dashboard 4.2
    - BI Dashboard 4.2 - Event Generator
    - BI Rep Svc Wkspc Config 4.2
    - BI Web Services for Java 9.2
    - Help Viewer Meta Config 9.2
    - Information Delivery Portal 4.2
    - Logon Manager 9.2
    - Package Viewer 4.2
    - Preference Manager
    - Preferences Manager 9.2
    - SAS Application Infrastructure**
    - SAS Web Analytics 5.3
    - SAS Web Analytics Server Config 5.3

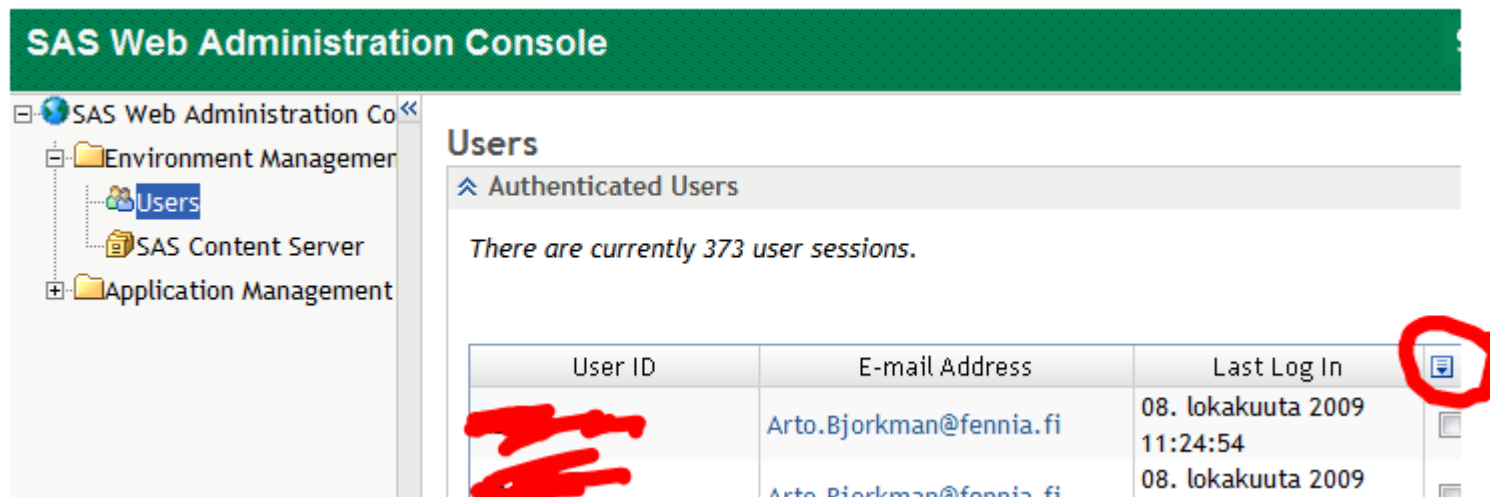
On the right side, there is a panel titled "Registered URL:" with two expandable sections:

- Application Settings
- Directives

Below these sections, a message states: "There are no directives associated with this application."



# Hallinta: SAS Web Administration Console



**SAS Web Administration Console**


SAS Web Administration Co

- Environment Management
- Users**
- SAS Content Server
- Application Management

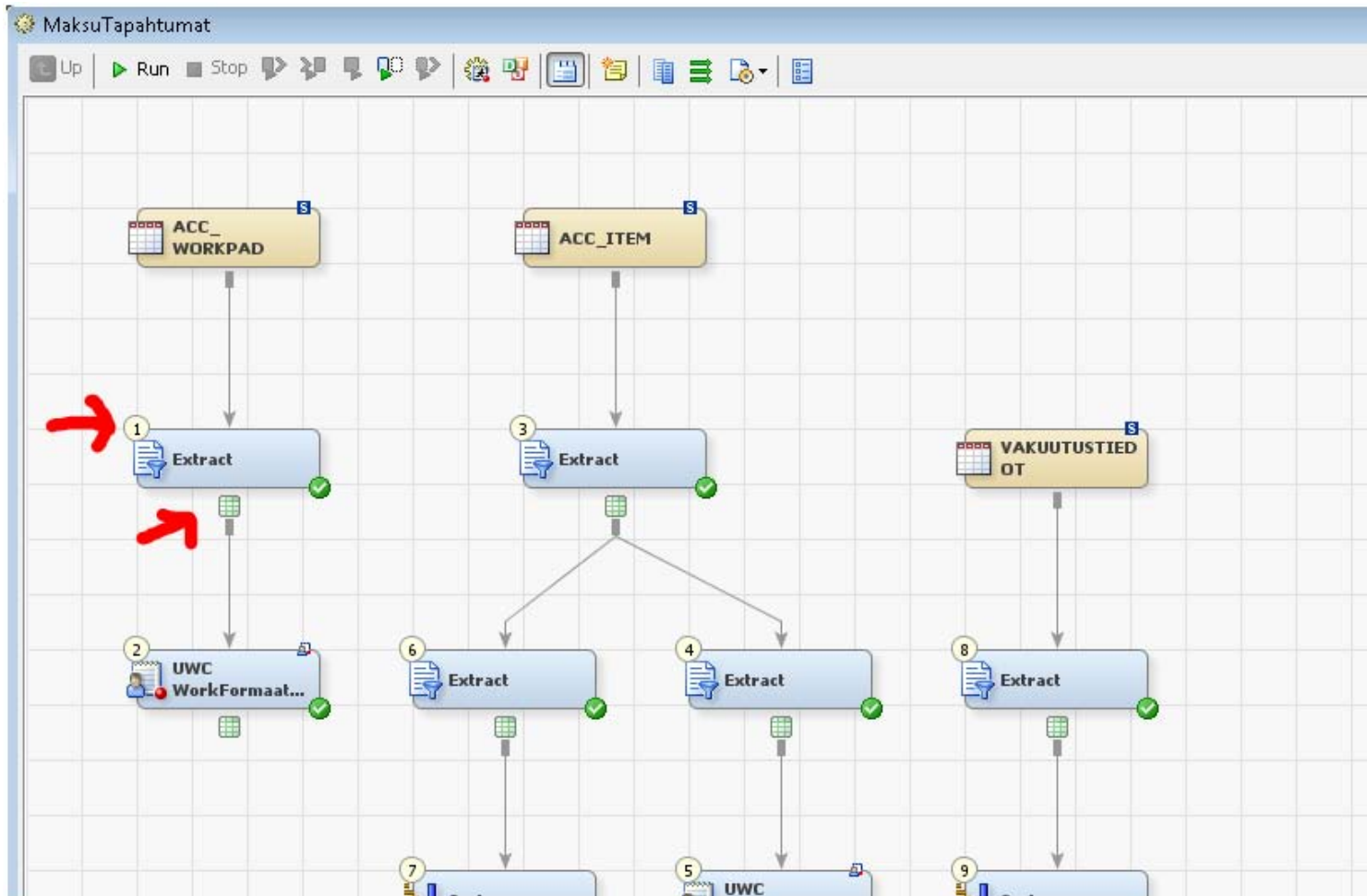
### Users

Authenticated Users

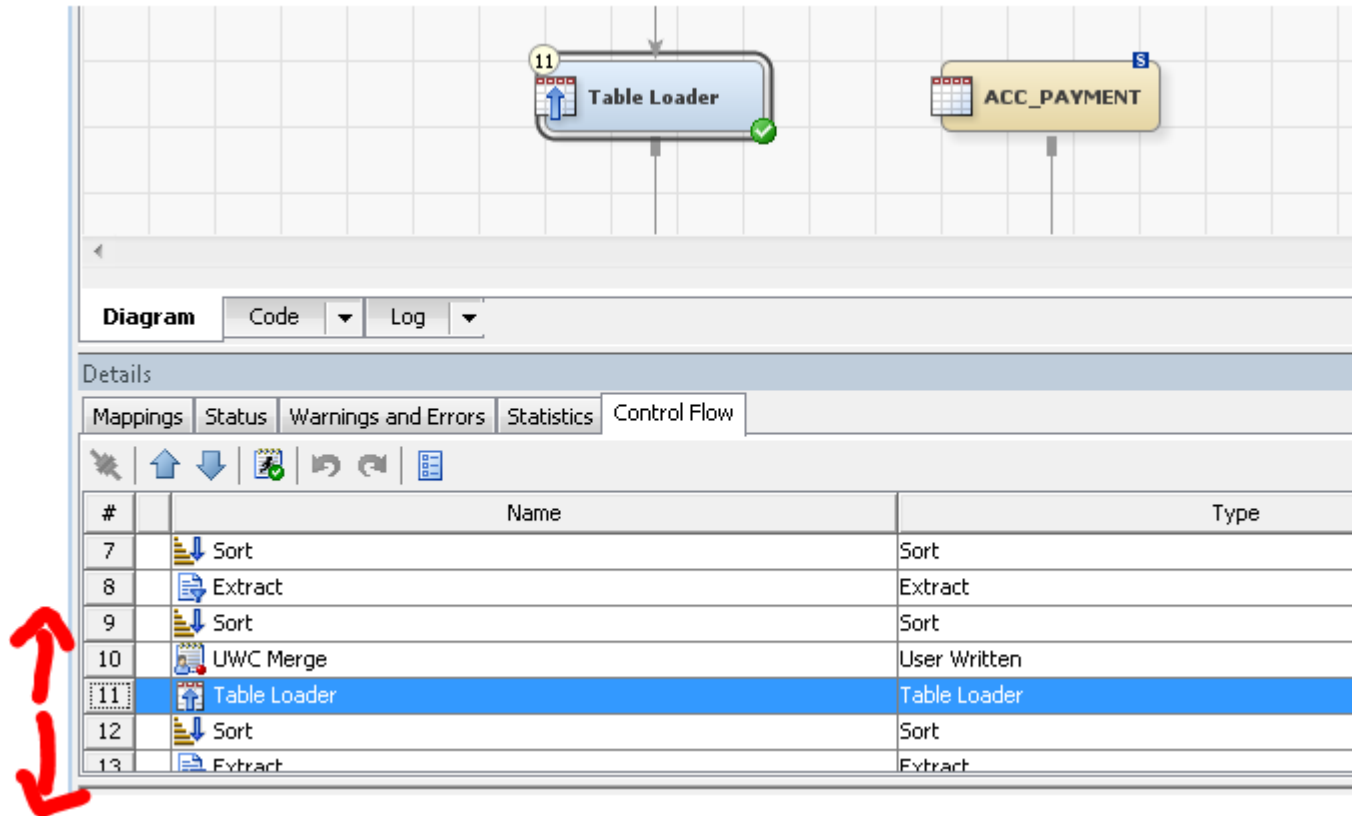
*There are currently 373 user sessions.*

User ID	E-mail Address	Last Log In	
[REDACTED]	Arto.Bjorkman@fennia.fi	08. lokakuuta 2009 11:24:54	
[REDACTED]	Arto.Bjorkman@fennia.fi	08. lokakuuta 2009	

# DI Studio: Layout (talleta), Work, Numerointi



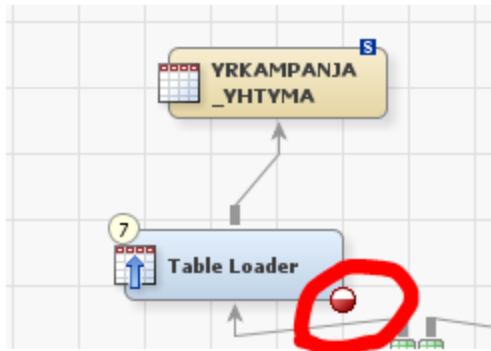
# DI Studio: Control Process Flow



The screenshot displays the DI Studio interface. At the top, a diagram shows two components: a 'Table Loader' (blue box with a green checkmark and a yellow '11' badge) and an 'ACC\_PAYMENT' component (yellow box with a blue '5' badge). Below the diagram, there are tabs for 'Diagram', 'Code', and 'Log'. The 'Details' section is active, showing a 'Control Flow' tab. A toolbar with navigation icons is visible above a table. A red double-headed arrow points to the table's first column.

#	Name	Type
7	Sort	Sort
8	Extract	Extract
9	Sort	Sort
10	UWC Merge	User Written
11	Table Loader	Table Loader
12	Sort	Sort
13	Extract	Extract

# DI Studio: Ongelmakohtien indikointi



General Load Technique Mappings Options Table Options Code Precode and Postcode Status Hand

Source table: User Written (W5RCS1YQ)

#	Column	...	Type	Length
1	v		Chara...	1 (No
2	f		Chara...	50 (No

Target table: YRKAMPANJA\_YHTYMA (YRKAMI)

#	Column	C...	Expression
1	v		1
2	f		

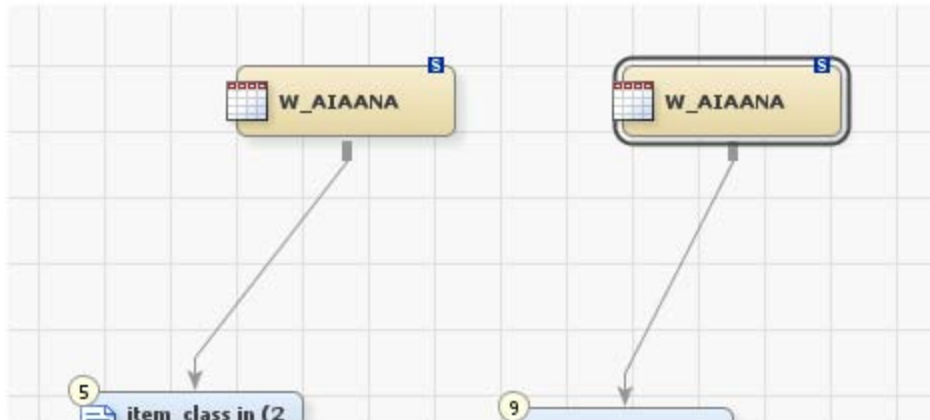
Diagram Code Log

Details

Mappings Status Warnings and Errors Statistics Control Flow

Order	Name	Status
1	Precode	Completed successfully
2	Table Loader	Incomplete

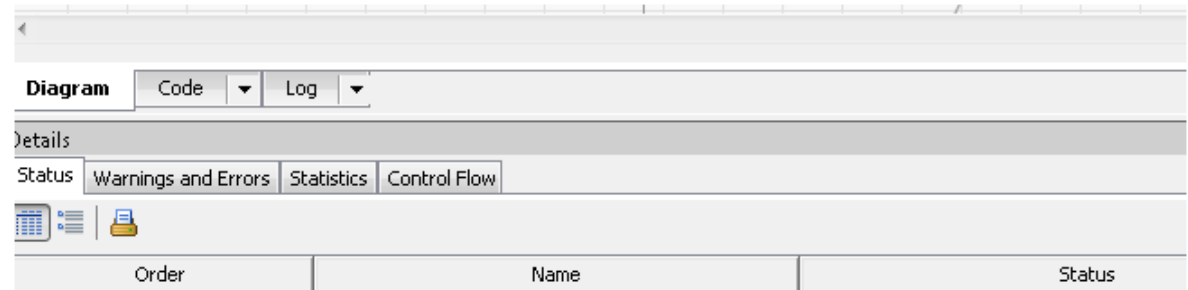
# DI Studio: Sama taulu useampaan kertaan



# DI Studio: Ajon hallinta

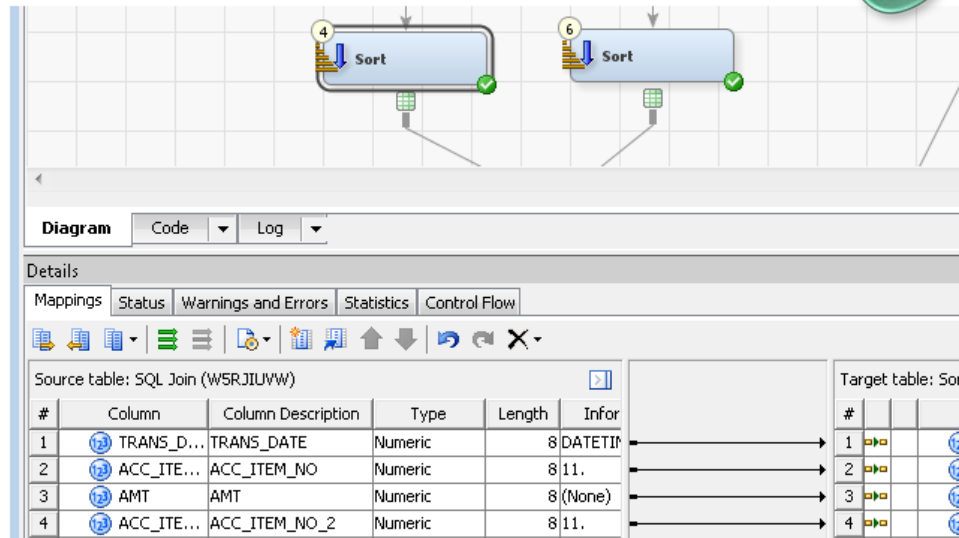
- ▶ Run
- ▶ Run From Selected Transformation
- ▶ Run To Selected Transformation
- ▶ Run Selected Transformations
- ▶ Step
- ▶ Continue
- ▶ Stop
  
- ▶ Status
- ▶ Warnings and errors
- ▶ Statistics

Super!



# DI Studio: Mappings

Super!



Diagram

Code

Log

Details

Mappings

Status

Warnings and Errors

Statistics

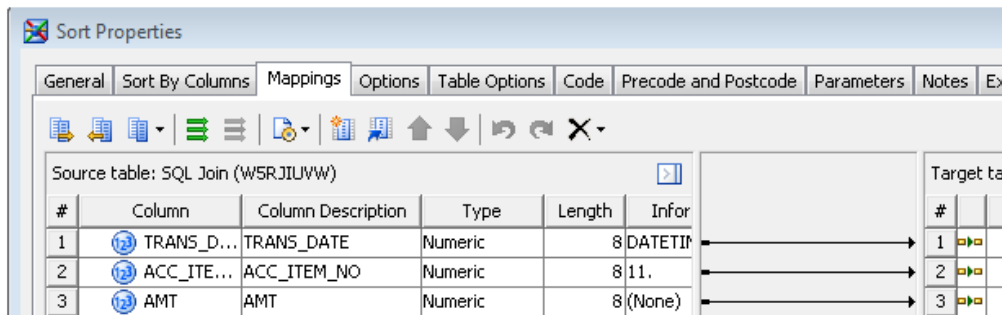
Control Flow

Source table: SQL Join (WSRJUIVW)

#	Column	Column Description	Type	Length	Infor
1	TRANS_D...	TRANS_DATE	Numeric	8	DATETIP
2	ACC ITE...	ACC_ITEM_NO	Numeric	8	11.
3	AMT	AMT	Numeric	8	(None)
4	ACC ITE...	ACC_ITEM_NO_2	Numeric	8	11.

Target table: Sort

#	Column	Column Description	Type	Length	Infor
1					
2					
3					
4					



Sort Properties

General

Sort By Columns

Mappings

Options

Table Options

Code

Precode and Postcode

Parameters

Notes

Ex

Source table: SQL Join (WSRJUIVW)

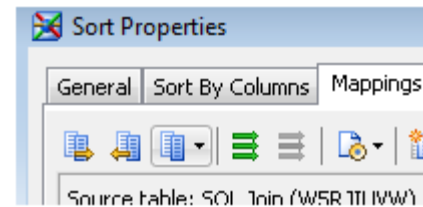
#	Column	Column Description	Type	Length	Infor
1	TRANS_D...	TRANS_DATE	Numeric	8	DATETIP
2	ACC ITE...	ACC_ITEM_NO	Numeric	8	11.
3	AMT	AMT	Numeric	8	(None)

Target table: Sort

#	Column	Column Description	Type	Length	Infor
1					
2					
3					

# DI Studio: Mappings

- ▶ Propagete from sources to targets
- ▶ Propagete from targets to sources
- ▶ All
- ▶ Selected
- ▶ From/To Beginning/End



# DI Studio: Reports

Reports

Show: All

#	Name	Description	Type	Last Run	Last Saved
1	Tables Report	Shows a list of all of the tables in the r...	Table		
2	Job Documentation	Generate ETL job documentation	Job		

Report results  
All report results will be stored in the default location.  
Default Location: Z:\Documentation\Jobs  
\* File Name: TablesReport.html

Z:\Documentation\Jobs\start.html

SAS Data Integration Studio generated documentation

## SAS Data Integration Studio generated documentation

This documentation has been compiled for Metadata Server by user JJA@YF.  
Date of compilation: 24. heinäkuuta 2009 9:13:49 EEST  
Storage location: Z:\Documentation\Jobs\

**Libraries**

The Libraries section contains 60 entries. Click [here](#) to change to the detail view.

**Tables**

The Tables section contains 9928 entries. Click [here](#) to change to the detail view.

**Jobs**

The Jobs section contains 340 entries. Click [here](#) to change to the detail view.

**Repositories**

The Repositories section contains 3 entries. Click [here](#) to change to the detail view.

# Tehokkuus

- ▶ Metadatan koko 9.2:ssa n. **12%** 9.1.3:n metadatatista
  - ▶ Kaikki keskustelevat metadatan kanssa
  - ▶ → nopeusvaikutus laajalti
  - ▶ WorkspaceServer
  - ▶ DIStudio
  - ▶ Portal administrointi
  - ▶ DashBoard
- ▶ Yleinen ”mutu”: suorituskyky on parantunut



# Tehokkuustestejä 9.2 vs. 9.1.3 Fenniassa

- ▶ Yksinkertainen SQL: 25% nopeampi
- ▶ Sort, 12 milj. riviä: 5% nopeampi
- ▶ Data-vaihe, 50 milj. riviä: 15 % nopeampi
  
- ▶ Portal kyselyt (Stored Process, suuruusluokka muutama sekunti) hivenen nopeampia
  
- ▶ Tehokkuuteen vaikuttavat myös monet satunnaistekijät!
- ▶ Testejä EI ole tehty ”laboratorio-olosuhteissa”!



# Yhteenveto

- ▶ Migraatioprosessi on suoraviivainen, kun valmistautuu hyvin
  - ▶ Intelligence Platformin hallinta on helpottunut
  - ▶ DI Studioissa on merkittäviä parannuksia
  - ▶ Suorituskyky on parempi
- 
- ▶ **→ Siirtyminen SAS 9.2:een kannattaa**



# Kysymyksiä?

Kiitos mielenkiinnosta

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