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# Remain

## on the IBM i

# Introduction

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Wim Jongman

CTO – Remain Software  
TD/OMS and Gravity

All around techno freak

3D printing, IoT, Programming, DevOps, Web Graphics, Git fanboy.

Open Source

Eclipse Nebula Lead,  
Committer for E4 Incubator.

Sloeber Committer, an Eclipse IoT IDE



.. and in my free time I like to ..

# Remain Software

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- Independent software company since 1992;
- Application Lifecycle Management

# Remain Software

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- Independent software company since 1992;
- DEVOPS !!!
- 25 years DevOps track record
- Founded for DevOps
  - RElease MAnagement INternational
- Based in the Netherlands
- Worldwide Distributor Network



**REMAIN**  
SOFTWARE

# Introduction

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The Magic User Group Git repo:

<https://github.com/magic-user>

This content is here

<https://github.com/magic-user/ug-meetings>



**REMAIN**  
SOFTWARE

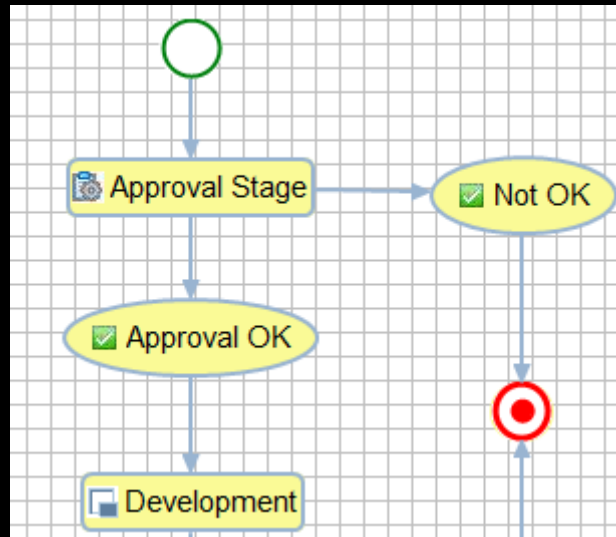
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# Products

Gravity

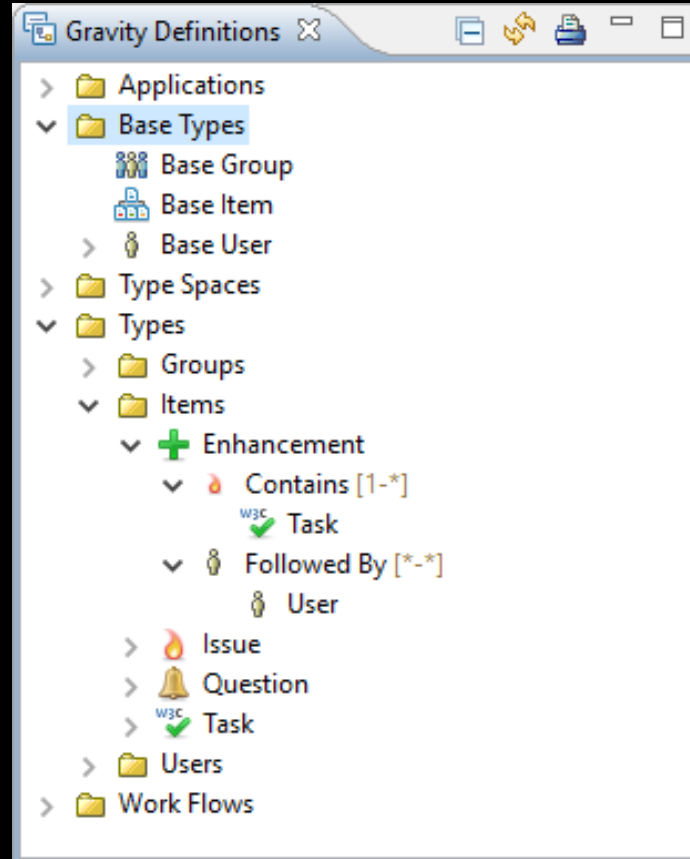
# Gravity

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# Gravity

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# Gravity

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- IT Workflow
  - Project Management
  - Helpdesk
  - Service Management
- Business Workflow
  - User Registration
  - Password Reset
  - ...

---

# Gravity

1 Minute Demo

# Gravity

Gravity x

Not secure | magic.magic-ug.org/gravity/wm/ ☆

Apps nebula.release Config

MAGIC  
MAY ALABAMA CENTER FOR BONE  
COLLABORATION

Sign in Sign up

Username

Password

Sign in

☐ Keep me signed in

[Forgot your password?](#)

[Create an account](#)

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[Gravity](#) - [Report a bug](#)

# Gravity

The screenshot shows the Gravity web application interface. The browser address bar displays `magic.magic-ug.org/gravity/wm/`. The application header includes the MAGIC logo, a search bar, and navigation icons. The main content area is titled "WorkManagement" and features a "New" button. On the left, there are filters for "My Favorite Filters" (0) and "Public Filters" (9). A list of filters is shown with their counts:

Filter	Count
All	33
All Open	20
All Verified	12
All Questions	8
My Enable User	0
My Open Questions	0
My Questions	0
My Setup	0
Open Enable Users	8

The right sidebar contains a "No work item selected yet!" message, tabs for "Attachments", "Dates", "Extended", and "Links", and a "Comments" section with a text input and a "Comment" button.

# Gravity

The screenshot shows the Gravity application running in a web browser. The browser's address bar displays the URL `magic.magic-ug.org/gravity/wm/`. The application's header includes the MAGIC logo, a search bar, and user profile icons. The main interface is divided into three sections: a left sidebar for navigation, a central workspace, and a right sidebar for work item details.

**Left Sidebar: WorkManagement**

- Navigation links: Tags, Favorite Items, Connections.
- My Favorite Filters: 0 items.
- Public Filters: 9 items.
- Filter List:

Filter Name	Star	Count
All	☆	33
All Open	☆	20
All Verified	☆	12
All Questions	☆	8
My Enable User	☆	0
My Open Questions	☆	0
My Questions	☆	0
My Setup	☆	0
Open Enable Users	☆	8

**Central Workspace**

- A "New" button is visible, with a dropdown menu containing: Applications, AddGravity, EnableUser, Question, and UserSetup.

**Right Sidebar: Work Item Details**

- Message: "No work item selected yet!"
- Attachments: Dates, Extended, Links.
- Comments: 0 items.
- Rich text editor with a toolbar (B, I, H, etc.) and a "MarkDown" dropdown.
- Placeholder text: ">> To add a comment, please select a work item first."
- Comment button: "Comment".

# Gravity

The screenshot displays the Gravity WorkManagement interface. The browser address bar shows `magic.magic-ug.org/gravity/wm/`. The interface includes a sidebar on the left with a 'WorkManagement' header and a list of filters. The main content area features a 'New' button and a dropdown menu with options like 'Applications', 'AddGravity', 'EnableUser', 'Question', and 'UserSetup'. The 'EnableUser' option is expanded, showing a 'Work\_User' selection. The right panel contains a 'Comments' section with a text input and a 'Comment' button.

**MAGIC**  
MAY ALABAMA CENTER FOR BIOMEDICAL RESEARCH  
COLLABORATION

Search ...

**WorkManagement**

Tags Favorite Items Connections

My Favorite Filters 0

Public Filters 9

All	☆	33
All Open	☆	20
All Verified	☆	12
All Questions	☆	8
My Enable User	☆	0
My Open Questions	☆	0
My Questions	☆	0
My Setup	☆	0
Open Enable Users	☆	8

**New**

- Applications
- AddGravity
- EnableUser **Work\_User**
- Question
- UserSetup

No work item selected yet!

Attachments Dates Extended Links

Comments 0

**B I H** [Icons] Markdown

>> To add a comment, please select a work item first.

Comment

magic.magic-ug.org/gravity/wm/#

# Gravity

The screenshot shows the Gravity WorkManagement interface in a web browser. The browser address bar displays `magic.magic-ug.org/gravity/wm/`. The interface includes a search bar, a navigation menu on the left, a central content area, and a right sidebar with attachments and comments.

**MAGIC**  
MAGNETIC UNIVERSITY GROUP OF BRITAIN  
COLLABORATION

Search ...

**WorkManagement**

Tags Favorite Items Connections

My Favorite Filters 0

Public Filters 9

All 33  
All Open 20  
All Verified 12  
AllQuestions 8  
My Enable User 0  
MyOpenQuestions 0  
MyQuestions 0  
MySetup 0  
Open Enable Users 8

**New**

- Applications
- AddGravity
- EnableUser **Work\_User**
- Question
- UserSetup

No work item selected yet!

Attachments Dates Extended Links

Comments 0

B I H [icons] MarkDown

>> To add a comment, please select a work item first.

Comment

magic.magic-ug.org/gravity/wm/#

# Gravity

Gravity x

magic.magic-ug.org/gravity/wm/

Apps nebula.release Config

MAGIC

Search ...

+ New

Subject

Enable User ID

Description

B I H [Icons] Markdown

Your Password will be ALL CAPS

Reporter

admin

Assignee

admin

Priority Severity Status

Cancel Create Work\_User Show hidden fields

Attachments

Extended Fields

User ID

Response



# Gravity

Gravity

magic.magic-ug.org/gravity/wm/

Apps nebula.release Config

MAGIC

Search ...

WorkManagement

Tags Favorite Items Connections

My Favorite Filters 0

Public Filters 9

All 34

All Open 21

All Verified 12

All Questions 8

My Enable User 1

My Open Questions 0

My Questions 0

My Setup 0

Open Enable Users 9

New

EU00013 - Enable User ID

Work\_User reporter: admin - Assignee: admin - Stage: Enable User - App: EnableUser

Sep 28, 2017 12:37 0 0 0 0 Due: edit

EU00013 - Enable User ID

Attachments 0 Dates Extended Links

Comments 0

Summary...

B I H [Icons] MarkDown

Join the discussion...

Comment

# Gravity

Gravity

magic.magic-ug.org/gravity/wm/

Apps nebula.release Config

MAGIC

Search ...

WorkManagement

Tags Favorite Items Connections

My Favorite Filters 0

Public Filters 9

All 34

All Open 21

All Verified 12

All Questions 8

My Enable User 1

My Open Questions 0

My Questions 0

My Setup 0

Open Enable Users 9

New

Transfer this item to another stage

4

EU00013 - Enable User ID

Work\_User reporter: admin - Assignee: admin - Stage: Enable User - App: EnableUser

Sep 28, 2017 12:37 0 0 0 0 Due: edit

Attachments 0

Dates Extended Links

Comments 0

Summary...

B I H [icons] MarkDown

Join the discussion...

Comment

magic.magic-ug.org/gravity/wm/#

# Gravity

Gravity

magic.magic-ug.org/gravity/wm/

Apps nebula.release Config

MAGiC

Search ...

WorkManagement

Tags Favorite Items Connections

My Favorite Filters 0

Public Filters 9

All 34

All Open 21

All Verified 12

All Questions 8

My Enable User 1

My Open Questions 0

My Questions 0

My Setup 0

Open Enable Users 9

New

EU00013 - Enable User ID

Work\_User reporter: admin - Assignee: admin - Stage: Enable User - App: EnableUser

Sep 28, 2017 12:37 0 0 0 0 Due: edit

Enable User IBMI\_Chgusrprf ProfileEnabled

Close Save

EU00013 - Enable User ID

Attachments 0 Dates Extended Links

Comments 0

Summary...

B I H [Icons] MarkDown

Join the discussion...

Comment

magic.magic-ug.org/gravity/wm/#itemId4726b66084b011e7eb9915159d8ce05d



**REMAIN**  
SOFTWARE

# Gravity

The screenshot displays the Gravity application interface within a web browser. The browser's address bar shows the URL `magic.magic-ug.org/gravity/wm/`. The application header includes the MAGIC logo, a search bar, and navigation icons. The left sidebar, titled 'WorkManagement', contains a list of filters and a 'Public Filters' section with a table of items.

The main content area features a workflow diagram for the item 'EU00013 - Enable User ID'. The workflow consists of three stages: 'Enable User', 'IBMI\_Chgusrprf', and 'ProfileEnabled'. A tooltip 'Transfer the item to this stage' is visible over the 'ProfileEnabled' stage. Below the workflow, there are 'Close' and 'Save' buttons.

The right sidebar, titled 'EU00013 - Enable User ID', contains sections for 'Attachments', 'Dates', 'Extended', 'Links', 'Comments', and a 'Summary...' section. The 'Comments' section includes a text area for 'Join the discussion...' and a 'Comment' button.

**Public Filters Table:**

Filter Name	Star Icon	Count
All	☆	34
All Open	☆	21
All Verified	☆	12
AllQuestions	☆	8
My Enable User	☆	1
MyOpenQuestions	☆	0
MyQuestions	☆	0
MySetup	☆	0
Open Enable Users	☆	9

# Gravity

---

**Sexy?**



**REMAIN**  
SOFTWARE

# Gravity

---

- Web UI developed in DART (RDi)
- Eclipse UI Developed in Java (RDi)
- Server Backend Developed in Java (RDi)
- Runs on the IBM i
- Database DB2
- Workflow Calls
  - IBM i programs
  - Webservices

**SuperHOT!**



# Gravity

---

oh..

# Gravity

---

It runs on iPad



**REMAIN**  
SOFTWARE



---

# Products

TD/OMS

# TD/OMS

---

## ALM / Change Management / DevOps

- RDi
- Gravity
- Jenkins
- JIRA
- X-Analysis
- LANSA
- WebSmart
- Vision (Large Files)
- WebSmart
- Synon & Plex
- IFS
- Git
- GitHub
- ServiceNow



TD/OMS Work Management | Project Explorer

Current Release

- All Tasks
- My Tasks (DEMO)
- My Tasks (XA)
  - T0114 - Fix contacts documentation [XA \*NE]
  - T0113 - Fix the contacts database [XA \*TST]
    - Linked GitHub Issues
    - Linked Gravity Issues
    - Linked Requests (1)
    - Linked JIRA Issues
    - In Test (14)
      - \*FILE.DSPF
      - \*FILE.LF
      - \*FILE.PF
      - \*PGM.RPG
      - \*PGM.RPGLE
        - CNTCMAINT [\*TST - \*ACT - \*PGM
        - WWCCONS [\*TST - \*ACT - \*PGM.F
        - ZAUDASTATU [\*TST - \*ACT - \*PGM
        - ZAUDCUSF [\*TST - \*ACT - \*PGM.R

CNTCMAINT.RPGLE

```

Line 47      Column 1      Replace      Browse
...CL0N01Factor1++++++Opcode(E)+Extended-factor2++++++Comments+++
004500      C      *****
004600      C      *Mainline Code
004700      C      *****
004800      C      *Retrieve record
004900      C      cntacskey      chain(e)      rcntac
005000      C      if      not %found(cntacs)
005100      C      eval      *inlr = *on
005200      C      return
005300      C      endif
005400
005500      C      *Set screen values
005600      C      exsr      writescn
005700      C      eval      zmessage='Please make required changes.'
005800
005900      C      *Until Exit/Cancel
006000      C      dow      not *in03
006100      C      and not *in12
006200
006300      C      *Display screen
006400      C      exfmt(e)      zzft01
006500
006600      C      *If Exit/Cancel
  
```

Outline

type filter text

- Control Statement
- Global Definitions
  - Files
  - Data Structure
  - Fields
  - Indicators
  - Prototypes
  - Key Lists
  - Parameter List
- Main Procedure
  - Parameters
  - Subroutines

TD/OMS Components | TD/OMS Route Navigator | TD/OMS Job Messages | Thumbnail View | Console

100%

GCNTAC1

CNTLF4

CNTLF3

CNTLF2

CNTLF1

WWCCONS

ZAUDxyz.dll

CNTCMAINT

CNTACS

T0113 - Fix the contacts database [XA \*TST] (28 objects in selection.)

Name	Sub Path	Location	Description	Type	Attribute	Environment	Application
CNTACS	XAN4CDEM	XAN4CDEM	Contacts	*FILE	PF	*PRD	XA
CNTACS	XAN4DEMDD	XAN4DEMDD	Contacts	*FILE	PF	*RDY	XA
CNTACS	XAN4DEMTD	XAN4DEMTD	Contacts	*FILE	PF	*TST	XA
CNTACSXQ	XAN4DEMDC	XAN4DEMDC	Contacts	*FILE	PF	*DEV	XA
CNTCMAINT	XAN4CDEM	XAN4CDEM	Contacts Maintenance	*PGM	RPGLE	*PRD	XA
CNTCMAINT	XAN4DEMTO	XAN4DEMTO	Contacts Maintenance	*PGM	RPGLE	*TST	XA

Browse Replace 47:1 318M of 455M

# Remain

---

- Fair License Model
  - Per user, not processor capacity;
  - Subscription model. No up front license costs.
- On site or in the cloud
  - With Hamway SS & SIAS

---

## 2 Customer Cases

HH 'R US

# Customer Case

---

- Netherlands
  - Netherlands is a delta (AKA a swamp)
  - Amsterdam has no skyscrapers
  - Ocean is knocking on our dikes
  - We need to keep our feet dry
- Hoog Heemraadschap der Uitwaterende Sluizen



# Customer Case

---

- Development Team
  - 1 part time developer
  - Test team
- Number of Systems
  - 2, 1 dev, 1 production
- Number of deployments per year
  - A couple, mostly below 10
- Reason to buy
  - QUALITY!!!!



---

## 2 Customer Cases

Sligro Food Group



# Customer Case

---

- Sligro Food Group
  - Member of the LUG
  - Customer since 1995

# Customer Case

- 60 Self Service Shops



# Customer Case

---

- 9 Delivery service centers
- 130 Supermarkets
- X Distribution centers

# Customer Case

- Sligro Food Group
  - Turnover 2.8 Billion



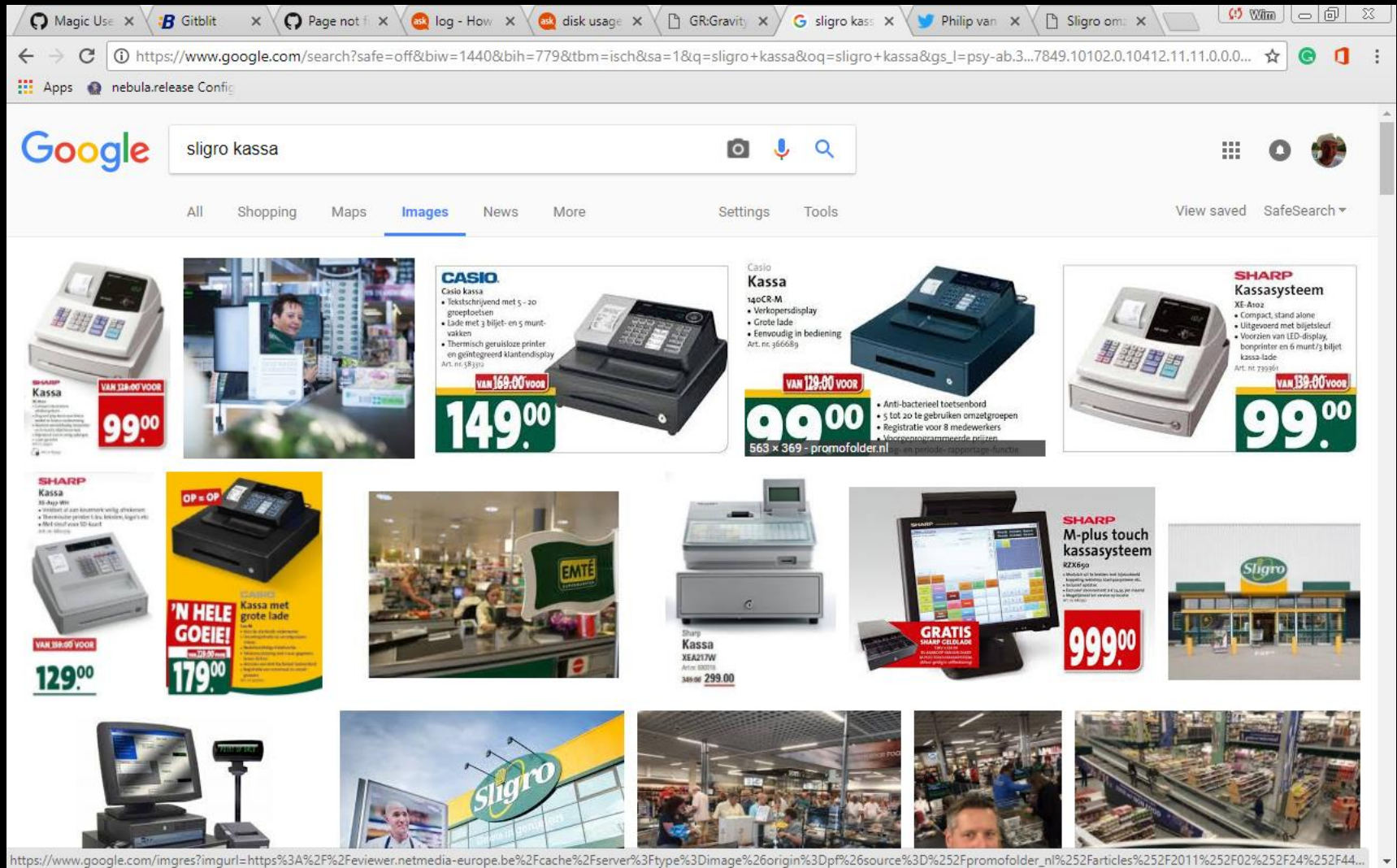
# Customer Case

---

- Development Team
  - 45 IBM i Developers
  - 2 DevOps
  - Supporting staff (management, test)
- Number of Systems
  - ? Dev
  - ??? Remotes
- Number of deployments per year
  - 4000 +/-
- Reason to buy
  - Full Lifecycle Control



# Customer Case





# Customer Case

Magic Use x Gitblit x Page not f x ask log - How x ask disk usage x GR:Gravity x sligro kass x Philip van x Sligro om: x Wim

Twitter, Inc. [US] | <https://twitter.com/philipbrand/status/679781571390476288>

Apps nebula.release Config

Home Moments Notifications Messages Search Twitter Tweet

 **Philip van den Brand**  
@philipbrand [Follow](#)

Wat 'n dag! Gazzerop bij @sligro Forepark #denhaag Dikke rijen voor kassa. Uitpuilende winkel. Gaaf!! #kersthulp

[Translate from Dutch](#)



10:52 PM - 23 Dec 2015

2 Likes 

   2 

**Philip van den Brand**  
@philipbrand

communicatie | nieuwsjager | presentator |  
hardlopen | kickboksen | Sint én Piet |  
Kussegat | Krollenloop | Veghel

 Veghel

 [sligrofoodgroup.nl](http://sligrofoodgroup.nl)

 Joined June 2009

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# Customer Case

Magic Use x Gitblit x Page not f x ask log - How x ask disk usage x GR:Gravity x sligro kass x Philip van x Sligro om: x Wim x

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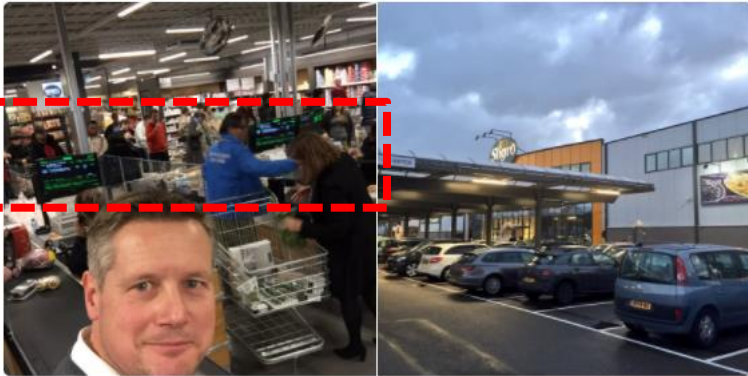
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Home Moments Notifications Messages Search Twitter Tweet X


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 Veghel

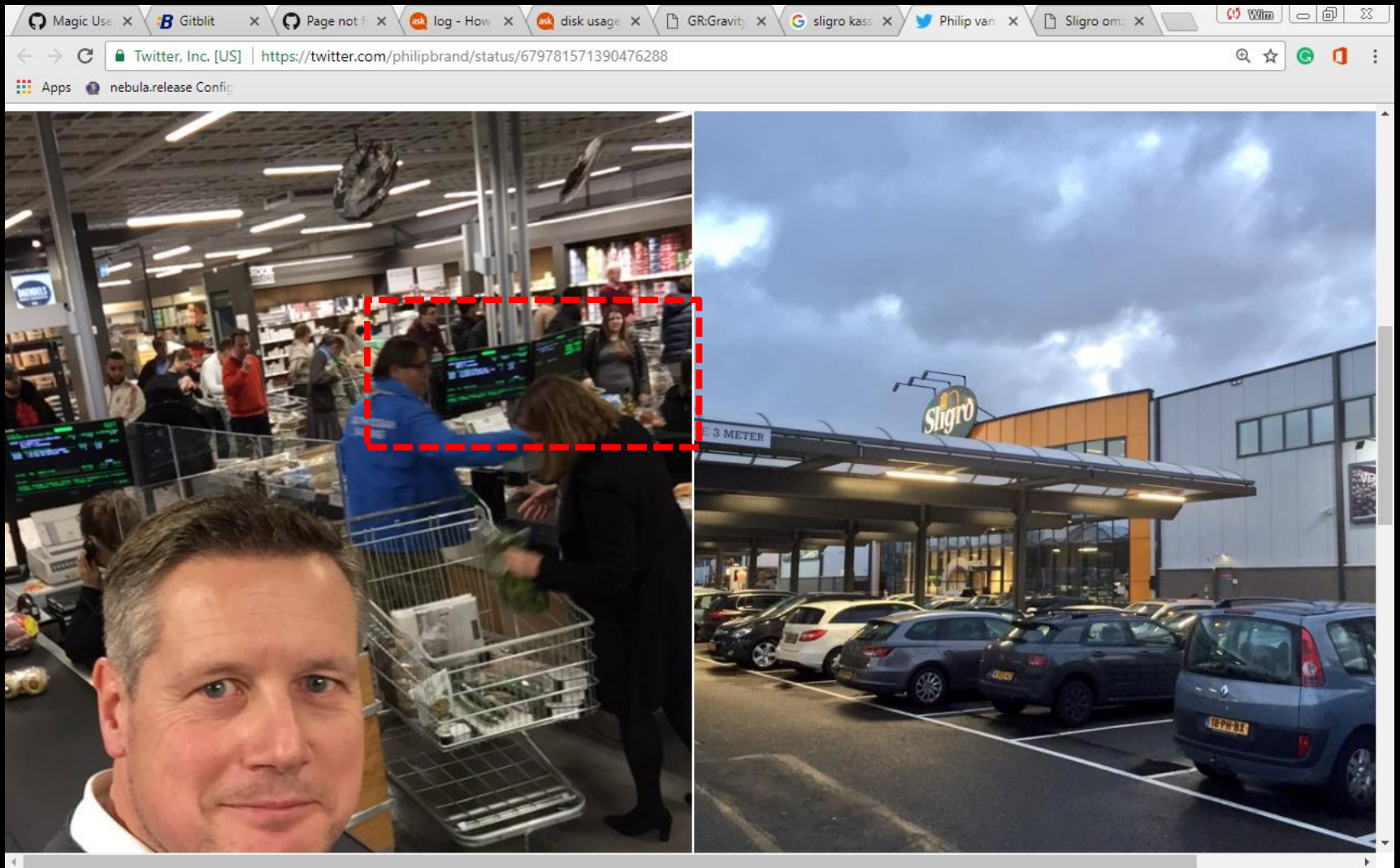
 [sligrofoodgroup.nl](http://sligrofoodgroup.nl)

 Joined June 2009

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# Customer Case



# Customer Case

---



**REMAIN**  
SOFTWARE

---

# Thank You!!

but wait ..

# Thank You!

---

SIAS



# Thank You, Laura and Team!

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# Introduction to Git (on the IBM i)

1:25 to 3:45

False Cape