



CRIS Analytics

Training Exercises



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Introduction

Purpose

The exercises contained in the document are designed to provide delegates with self-guided learning following CRIS Analytics Pro Training.

Audience

This document is aimed at anyone who has attended a CRIS Analytics Training session. It is not designed to be used by anyone who has not attended training, as the content assumes a certain amount of functional knowledge in order to undertake the exercises.



CRIS Analytics - Training Objectives

The classroom based CRIS Analytics Training session will comprise:

- Trainer Demonstration
- Guided Exercises
- Test Exercises

Training Objectives	
All Users	
1. VIEW AND REFINE DATA	<ul style="list-style-type: none"> ▪ Chart features - axes and legend ▪ Chart options - ellipsis menu ▪ Filtering data - range, legend, and drill ▪ Dashboard features - burger menu, new cells ▪ Chart Library
2. CHART CREATION	<ul style="list-style-type: none"> ▪ Edit existing chart ▪ Edit drill chart ▪ Create new chart ▪ Design a chart
Admin Users	
3. DASHBOARDS AND USERS	<ul style="list-style-type: none"> ▪ Understand Categories / Dashboard ▪ Understand how to add users to a category ▪ Understand Roles ▪ Understand how to create a user ▪ Allocate a category and a role to a user ▪ Security Settings ▪ Publish a layout



CRIS Analytics - Training Exercises

Part One - View and Refine Data

Exercise 1.1 - Log In

1. Log in with your username = wscap and password: wellbeingpro
Alternatively, you may be asked to login using training accounts as follows:
Username: train1, train2, train3, train4, train5 etc
Password: magentus
2. You should be on the "HSS Home" dashboard

Exercise 1.2 - Request to Report Completion (Last 3 months)

1. Navigate to the **Last Quarter** dashboard
 2. Open the chart **Request to Report Completion (Last 3 months) - HSS** in full screen
 3. Filter by range: **Last 7 days of the range**
 4. Filter by group: **Modality CT and MRI**
 5. **What was the average waiting time for CT events that occurred on the 6 day of the range?**
-
6. **Close** Full Screen View

Exercise 1.3 - Outstanding Urgent Reports - Last 14 Days

1. Navigate to the **Last Fortnight** dashboard
2. Open **Outstanding Reports (Last 14 Days)** in full screen
3. Drill to events that are **14 days old**
4. Drill to events **reported by any radiologist** you choose (**or not assigned as applicable**)
5. Sort the data list by **Examination Name**
6. **Export to Excel** and open the file
7. **Drill back to the Top Level**
8. **Close** Full Screen View

Exercise 1.4 - Top Performing Radiologists (Reporting) - Last 14 Days

1. Open **Top Performing Radiologists (Reporting) - Last 14 Days** in full screen
 2. Filter by a chosen **Modality**
 3. Choose **a radiologist** and drill into **any examination** name as applicable
 4. **What is the most recent event?**
-
5. **Drill back to the Top Level**
 6. **Close** Full Screen View



Exercise 1.5 - Add Charts to the Dashboard

1. You have all been given an individual workspace - i.e. Training User 1 - 16 to use for these exercises
2. Click the  menu and **select your individual workspace**
3. **Create four cells**
4. **Select Cell One** (Top Left) and click **[Replace Chart from Library] icon** to access Chart Library
5. **Search for 'Unreported'**
6. Add "**Unreported - Last 24 Hours - HSS**"

Please note: HSS Training > WS Trainer Workspace is an example of how your Training Dashboard should look when all exercises have been completed.

Test 1.6 - Outstanding Urgent Reports (Last 14 Days)

1. **Select Cell Two** (Top Right) and click **[Replace Chart from Library] icon** to access Chart Library
 2. Open **Chart Library** and search for "**Unreported over 2 weeks old - Last 3 months - HSS**"
 3. **Open Outstanding Urgent Reports (Last 14 Days) in full screen**
 4. Use filters and drilling to answer this question:
 5. **What is the highest number of outstanding events allocated for reporting to an individual Radiologist?**
-
6. **Drill back to the Top Level**
 7. **Close** Full Screen View

Part Two - Chart Creation

Exercise 2.1 - Edit a Chart

1. **Select Cell One** (Top Left)
2. Select **Edit Chart**  and [Open Read Only]
3. **Change title to Unreported - Last 24 Hours AED - YOUR INITIALS**
4. **Save as a New Chart** 
5. Click **[Replace Chart from Library] icon** to access Chart Library
6. Type your **Initials** and select your own "**Unreported - Last 24 Hours AED - YOUR INITIALS**" chart.
7. Select **Edit Chart** and make the following changes:

DRILL LEVEL 1 - DATA TAB:

8. Change **Y axis from Event to Exam Count Level 1** of the chart
9. Change **Legend from Report Urgency to Modality Description**

DRILL LEVEL 1 - CHART TAB:

10. Change chart to a **Stacked Bar Chart**

DRILL LEVEL 1 - FILTER TAB:

11. **Add Filter - Trust Name = Your Trust Name**



12. Add filter - Patient Type Description is equal to A&E Attender

CHART CONFIG 'COG' ICON:

13. Change **Chart Category** to your own workspace - i.e. Training User 1, 2, 3 etc.

14. Add **Version Control** to the **Help Text**

-----Version Control-----

INITIALS DATE - First Release

15. **[Save] your chart**

Exercise 2.2 - Edit a Drill Chart

1. Select Edit Chart for Unreported - **Last 24 Hours AED - YOUR INITIALS**

2. Select the **second drill level chart**

DRILL LEVEL 2 - DATA TAB:

3. Change **Event Count to Exam Count**

DRILL LEVEL 2 - ATTRIBUTES TAB:

4. Change **Chart Title** from **Outstanding {{Report Urgency Description}}** Reports to **Unreported {{Modality Description}}** Reports

5. Select the **third drill level chart**

DRILL LEVEL 3 - DATA TAB:

6. Add **Referring Location Description** and **Referrer Name**

7. **Reposition the Columns of data** based on your order preference

DRILL LEVEL 3 - ATTRIBUTES TAB:

8. Tick **"Full screen to display this Level"** to ensure the Table level data is displayed at full screen automatically.

9. **[Save] your chart**

Exercise 2.3 - Select, Copy and Edit Chart

1. **Select Cell Three** (Bottom Left)

2. Open **Chart Library** and search for **"Top 10 Performing Radiologists (Verifying) (Last 14 days)"**

3. Select **Edit Chart** and [Open Read Only]

4. **Change title to Unreported - Top 10 Performing Radiologists (Verifying) (Last 14 days) - INITIALS**

5. **Save a Copy** 

6. Click **[Replace Chart from Library] icon** to access Chart Library

7. Type your **Initials** and select your own **"Top 10 Performing Radiologists (Verifying) (Last 14 days) - INITIALS"** chart.

8. Select **Edit Chart** and make the following changes:

DRILL LEVEL 1 - FILTER TAB:

9. **Add Filter - Trust Name = Your Trust Name**



10. **Add Filter - Reported by is not equal** and type the word **AUTO** (do not choose from the list)

CHART CONFIG 'COG' ICON:

11. Change **Chart Category** to your own workspace - i.e. Training User 1, 2, 3 etc.

12. Add **Version Control** to the **Help Text**

-----Version Control-----

INITIALS DATE - First Release

13. **[Save] your chart**

Exercise 2.4 - Creating a New Chart

1. **Select Cell Four** (Bottom Right)

2. **Name your chart** - enter a title **"Verified Reports by Radiologist and Patient Type (Last 3 Months) - [INITIALS]"**

LEVEL 1 - DATA TAB

3. From the **Performance Indicators Last 3 Months** folder select:

4. **Y Axis = Event Count**

5. **X Axis = Reported By Name**

6. **Legend = Patient Type Description**

You may wish to consider turning off **AUTO** refresh if you are working in a Consortium

LEVEL 1 - CHART TAB

7. **Select Stacked Column Chart**

LEVEL 1 - FILTERS TAB

8. **Add Filter - Trust Name = Your Trust Name**

9. **Add Filter - Is Verified is equal to true**

10. **Add Filter - Reported by is not equal** and type the word **AUTO** (do not choose from the list)

LEVEL 1 - ATTRIBUTES TAB

11. Add **X Axis label - Reporting Radiologist**

Exercise 2.4.1 - Drill Level 2

12. Add **Drill Level 2** by clicking [+]

DRILL LEVEL 2 - DATA TAB:

13. **Y Axis = Event Count**

14. **X Axis = Modality Description**

15. **Legend = Patient Type Description**

DRILL LEVEL 2 - CHART TAB:

16. Select **Stacked Bar Chart**

DRILL LEVEL 2 - ATTRIBUTES TAB:

17. Chart Title - **{{Reported By Name}} - Total Reporting by Modality**



Exercise 2.4.2 - Drill Level 3

18. Add **Drill Level 3** by clicking [+]

DRILL LEVEL 3 - DATA TAB:

19. **Y Axis = Event Count**

20. **X Axis = Examination Name**

21. **Legend = Patient Type Description**

DRILL LEVEL 3 - CHART TAB:

22. Select **Stacked Column Chart**

DRILL LEVEL 3 - ATTRIBUTES TAB:

23. **All {{Modality Description}} Examinations**

Exercise 2.4.3 - Drill Level 4

24. Add **Drill Level 4** by clicking [+]

DRILL LEVEL 4 - CHART TAB:

25. Select **Table** to create columns of Data

DRILL LEVEL 4 - DATA TAB:

26. Remove **# Event Count** using [-]

27. Add [+] the following **Data Fields** using the filter search as required:

- Event Key
- Request Datetime
- Event Datetime
- Referring Location Description
- Patient Type Description
- Referrer Name
- Examination Name
- Report Verified Datetime
- Report Verified by Name

DRILL LEVEL 4 - SORTING TAB:

28. Add [+] Event Datetime

DRILL LEVEL 4 - ATTRIBUTES TAB:

29. Select "Full screen to display this level".



Exercise 2.5 – Chart Configuration

CHART CONFIGURATION

1. Check / Change **Chart Category** to your own workspace – i.e. Training User 1, 2, 3 etc.
2. Add **Help Text** and **Version Control**

Verified Reports by Radiologist and Patient Type (Last 3 Months) per Events / Request with drill paths to Modality Description, Examination Name and Chart Data.

-----Version Control-----

INITIALS DATE - First Release

3. **[Save]** your chart

Exercise 2.6 – Linking Charts

Linking charts is a useful function that enables a number of charts to be utilised in a Dashboard without compromising screen space and reducing chart loading times.

1. **Select Cell Three** (Bottom Left)
2. Select **Edit Chart**
3. Select **Chart Config** 

CHART CONFIGURATION

4. Click [+] to add a Chart Link
5. Type the label **[Last Quarter]**
6. Click the Chart Links dropdown and search using your INITIALS
7. Select “Verified Reports by Radiologist and Patient Type (Last 3 Months) – INITIALS”
8. **[Save]** your chart

It is important to ensure you create links on all reciprocal charts (i.e. Create a Return Journey between Linked Charts) to prevent creating Orphaned Chart Links.

9. Click the new chart link button **[Last Quarter]** which will take you to the linked chart
10. Select **Edit Chart**
11. Select **Chart Config** 

CHART CONFIGURATION

12. Click [+] to add a Chart Link
13. Type the label **[Last 14 Days]**
14. Click the Chart Links dropdown and search using your INITIALS
15. Select “Top 10 Performing Radiologists (Verifying) (Last 14 days) – INITIALS”
16. **[Save]** your chart

You should now be able to use the chart link buttons to toggle between charts.



Test 2.7 - Design a Chart

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> ▪ Who is this chart for? | <ul style="list-style-type: none"> ▪ What information do they want to see? | <ul style="list-style-type: none"> ▪ Which events do you want to include or exclude? |
|--|---|---|
1. Create a chart for a CT superintendent who would like to see all **Outstanding Outpatient Requests for a Modality - i.e. CT, MRI or XR**
 2. Create a **drill chart** to find out which **Clinics the requests are from**, and **How long it has been since the request**
 3. Add a **dynamic title** to the drill chart and add Chart Help and Version Control
 4. Drill to [specified exam]. **Where did the first (oldest) order come from?**

Objectives	Answers
Who is this chart for?	Modality superintendent
What information do they want to see?	All outpatients requiring appointments for a specific Modality
Which events do you want to include?	Orders and requests, Outpatients, and a specific Modality
Which events do you want to exclude?	Everything except Outpatients and all modalities except the modality required
Chart title	Modality - Outstanding Outpatient Appointments - INITIALS
Y axis (number/count)	Folder: Outstanding Orders and Requests #Count Outstanding
X axis (dimension/ordering)	Examination Name
Legend (dimension/grouping)	Referring Location Name
Chart Type	Stacked Column Chart
Filters	Trust Name = Your Trust Name Patient Type Description = Outpatient Modality = C, M or R (depending on your requirements)
Sorting	Count Outstanding in Z to A for highest to lowest
Drill Level - Chart Type	Data Table
Drill Level - Chart Columns	Unique Key, Examination Name, Date Submitted, Referring Location Name, Referrer Name and Hours Old
Drill Level - Attributes - Chart Title	Outstanding {{Examination Name}} Outpatient Examinations
Drill Level - Attributes - Full screen	Tick "Full screen to display this level"
Chart Configuration - Choose Category	Logged in Training Users Category
Chart Configuration - Help Text and Version	Modality Name - Outstanding Outpatient Requests with drill to data level information and -----Version Control-----
-	INITIALS DATE - First Release



Part Three - Configuration

Exercise 3.1 - Publish A Layout

Having designed a required dashboard, you will need to publish this as the default layout for access by other users.

1. Clicking the  icon at the top right of the Analytics menu-bar and select "Save as Default Layout"

Exercise 3.2 - Create Your Own Dashboard Category

Categories are the Menu options accessed via the  'Burger' Menu in the main Analytics HTML client. It is also possible to create nested categories - i.e. Parent and Child Menu such as the HSS Training Category (Parent) and nested Training Workspace categories (Children).

1. Click the  icon at the top right of the Analytics menu-bar to access Analytics Configuration
2. Select the **Categories** tab and **Training Workspace** subcategory
3. Create a **new category using [*] icon** on the Category folder
4. **Category Description = Initials Workspace** (i.e. ESM Workspace - Dashboard)
5. **Label = Initials Dashboard**
6. **Parent category = Training Workspace**
7. **[Save]** category by clicking the [Save]
8. Now click **User Access > Category**
9. Click the new Category - INITIALS Workspace and select the Filter Role Name **Training Delegate**
10. [Save] and go [Back to Dashboard] to see the menu option / category that has been added

Exercise 3.4 - Create a New User

Magentus recommend generic system logins for groups of users – i.e. MODLEADS or ADMINMGRS since Analytics' is query, rather than data entry tool.

However, to create a new user account for yourself navigate to the Users and click + to add a New User

1. Create a new user as follows:

Username	=	Same as CRIS Userid
User Type	=	Select Designer (D)*
Parent User	=	Admin Managers (only for Super Users / Key Users)
Forename	=	Your Name
Surname	=	Your Surname
Email	=	Enter e-mail address as this is a mandatory field
Allow Password Login	=	Ticked
Password	=	Set a generic password (i.e. crisuser)
Password Expires	=	Tick / Select (to ensure password resets on first login)
Allow External Login	=	Tick to allow login from a Chart URL
User Expiration Date	=	Add Expiration Date or Leave Blank to negate expiry



Theme = Leave Blank

2. **[Save]** the new user account
3. Navigate to **User Access Tab** and chose your user - i.e. Training User 1 and add the following roles to the User Account:
 - Training Delegate
 - Analytics Free View
 - Analytics Pro
4. **[Save]** the Role access
5. Return to the main Analytics HTML client and login in using the new user account / temporary password.
6. Create a new password for future use in the system

***Details of Roles and Security Permissions** are explained on Page 23. of *CRIS_CRIB601_Analytics_Manual*

Exercise 3.5 - View User Level Configuration Settings

It is possible to configure Various **Security Configuration** via the **Settings** menu as follows:

The screenshot shows a 'Security Configuration' settings panel with the following fields and options:

- Password Expires After Day(s): 90
- Minimum Password Length: 6
- Prevent Users From Using Last Password(s): 3
- Prevent Users From Using Compromised Passwords
- Prevent Users From Using Weak Passwords
- Max Failed Logins: 10
- User Sessions Timeout After Minutes Of Inactivity: 60
- JWT Auth Public Key: (empty field)
- Enable concurrent log ins for a single user

1. Do not make changes without agreeing these centrally.
2. **[Save]** any changes as applicable.



Document Control

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