



# Displays & Dashboards

Advanced Lab

Wednesday, October 18, 2017

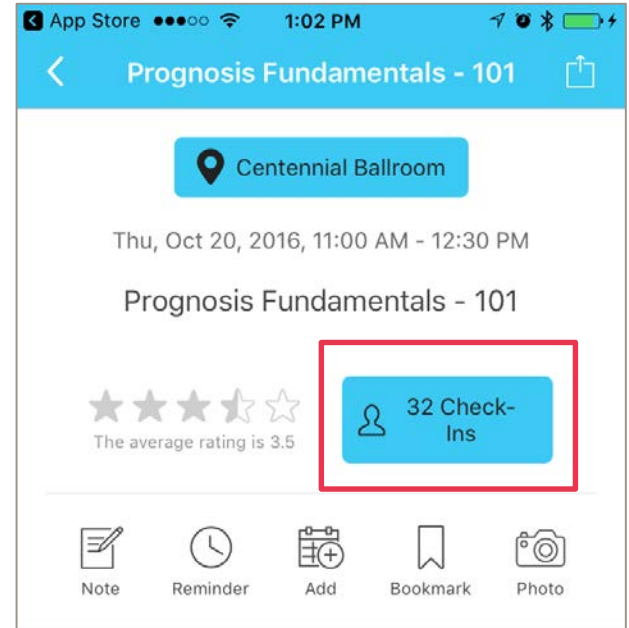
Ali Athar





# Welcome!

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# Displays

## Introduction

The following lab session requires that you have attended or are familiar with the content covered in the previous 'Displays & Dashboard' Beginner Lab session.



## Learning Objectives

**After completing this Advanced 'Displays' lab module you should:**

- Know the various **data filtering** methods available in presenting data
- Know the **data aggregation** functionality available in presenting data



## Learning Objectives

- Know how to create **After completing this Advanced 'Displays' lab module you should:**
- **Visual alarms**
- Know how to create multiple display navigation hierarchy via **drilldown and prompt values**



## Learning Objectives

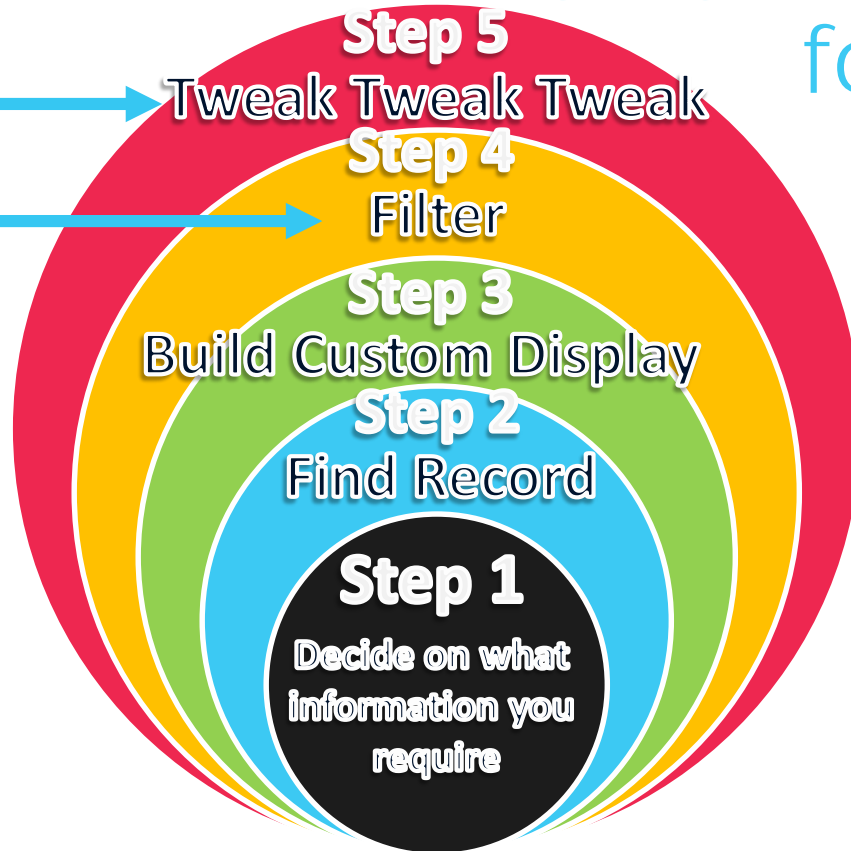
**After completing this Advanced 'Displays' lab module you should:**

- Understand how to upload a **WebUI Dashboard**
- Know some **Gotchas & Tips** in display creation



# Prognosis Packaging – Easy steps for success

Topics covered in this session





# ii • Where to find Prognosis Record Info

The screenshot shows the navigation menu of the ii prognosis website. The menu is displayed on a dark background with white and light blue text. The 'ii prognosis' logo is in the top right corner. A search bar is located in the center of the top navigation bar. The main navigation items are listed on the left side, with 'Prognosis Records' highlighted by a red rectangular box. On the right side, a vertical list of links is visible, including 'Notices', 'Contact Us', 'Documentation Conventions', 'Documentation Feedback', and 'Technical Support'. The background features a pattern of large, overlapping circles in shades of blue and red.

ii prognosis

Home Menu A-Z Search Print

-Search-

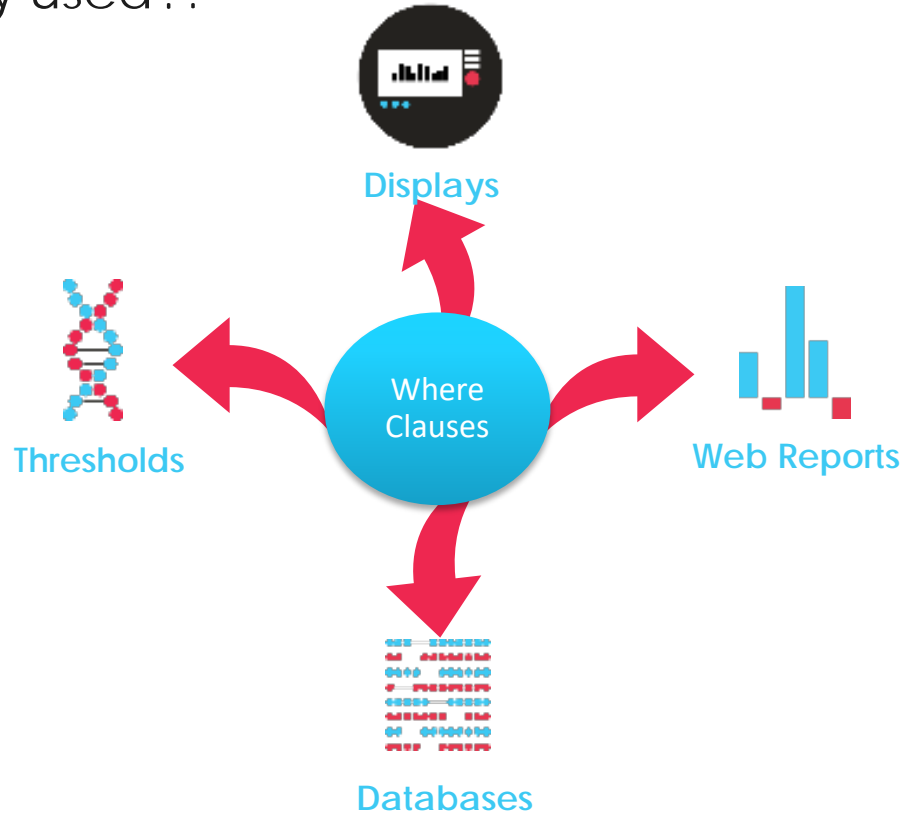
- Introduction
- What's New in this Version
- Deployment and Installation
  - Deployment and Installation
- Using Prognosis
  - Operations
  - Security
  - User Interfaces
  - System Functions
  - Prognosis Records

Notices  
Contact Us  
Documentation Conventions  
Documentation Feedback  
Technical Support



# Filtering – Where Clause

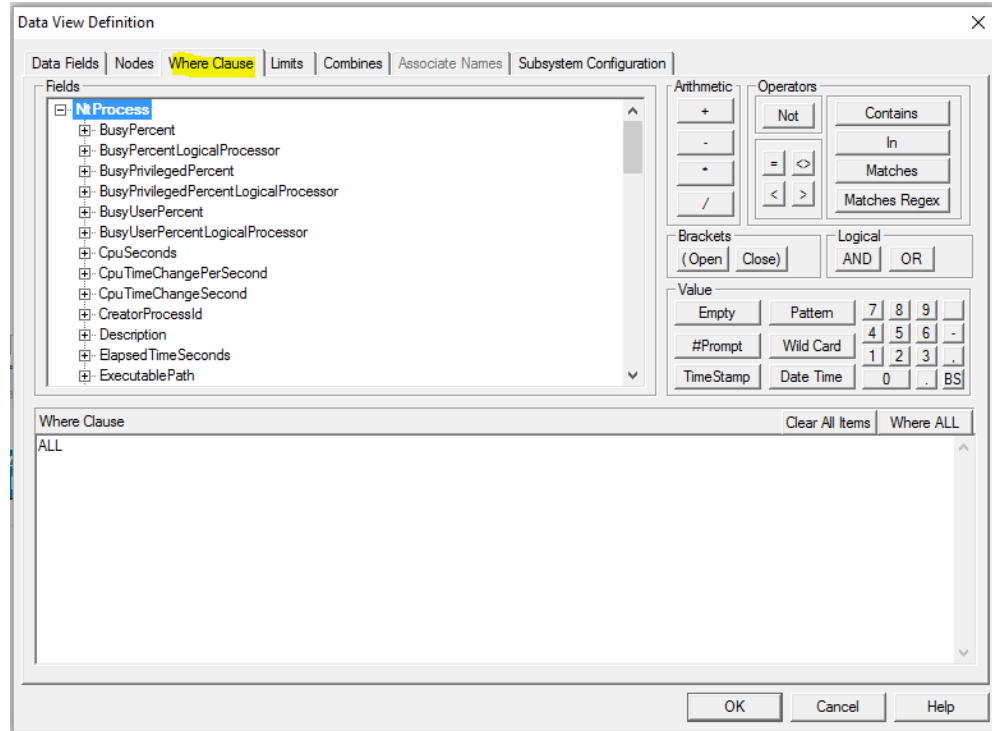
- Where are they used?:





# Data Filtering – Where Clause

Where Clause syntax is utilized in multiple areas of Prognosis where filtering data is required. Including displaying, thresholding & conditional visual alarming & conditional aggregation of data.





# Where Clause Examples

- Select records whose process type is "Extractor (0)" or "Extractor":
  - **PROCTYPE CONTAINS "Extractor"**
- Using the MpAvailability (AVMON) record, this Where Clause is looking for applications that are in a "down" state:
  - **CURSTATE = "DN" AND TYPE = "APPLICATION"**
- Using the NtNetworkInterface (NTNETINT) record, this Where Clause will report on all (>0) inbound packets containing errors and outbound packets that could not be sent due to errors:
  - **ERORRECV > 0 OR ERORSENT > 0**



# Where Clause Examples

- The following example is true when either the current state is not "UP" or when there is an application called "TESTAPPLI" and it last failed today:
  - **ID MATCHES "TESTAPPLI" AND TYPE="APPLICATION" AND LASTFAIL>StartofDay OR CURSTATE NOT MATCHES "UP"**
- In this example brackets are used to make sure that only those records with a FAILCNT>0 and an ID of either Z or WINWORD are selected:
  - **FAILCNT>0 AND (ID MATCHES "Z" OR ID MATCHES "WINWORD")**
    - Without the brackets, any record with a FAILCNT>0 and an ID of Z would be selected, plus any records simply with the ID of WINWORD.
- Select records which are either for CDROM drives with a disk inserted, or not for a disk device that is currently down:
  - **(SUBDEV MATCHES "CDROM" AND CURSTATE MATCHES "UP") OR ((SUBDEV NOT MATCHES "CDROM" OR SUBDEV=EMPTY) AND (CURSTATE NOT MATCHES "UP") AND (TYPE NOT MATCHES "DISK"))**



# Online Help - Where Clauses Syntax Details

[You are here: Home](#) > [Prognosis System](#) > [System Functions](#) > [Where Clauses](#) > [Where Clauses](#)

## Where Clauses

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The Where Clause functionality is used in Thresholds, Displays, Database Collections and Database Summaries to specify which data is to be selected from the many records available in Prognosis.

For example, you can create a Where Clause to collect data only from CPU's that are greater than 80% busy, or disks that have less than 10% free space. The Where Clause is created by nominating a specific field from a Prognosis record (e.g. NtCpu.BusyPercent), then applying the required collection criteria to it (e.g. >80).

The Where Clause enables you to filter incoming data according to the specified criteria. The default Where Clause is ALL, which allows all data from a record to be collected.

*This section contains the following topics:*

- ▶ [Example Where Clause Statements](#)
- ▶ [Creating a Where Clause](#)
- ▶ [Prompts in Where Clause](#)
- ▶ [LIST Processing](#)
- ▶ [Wildcard Characters](#)
- ▶ [Regular Expression Matching](#)
- ▶ [Date and Time Calculations](#)

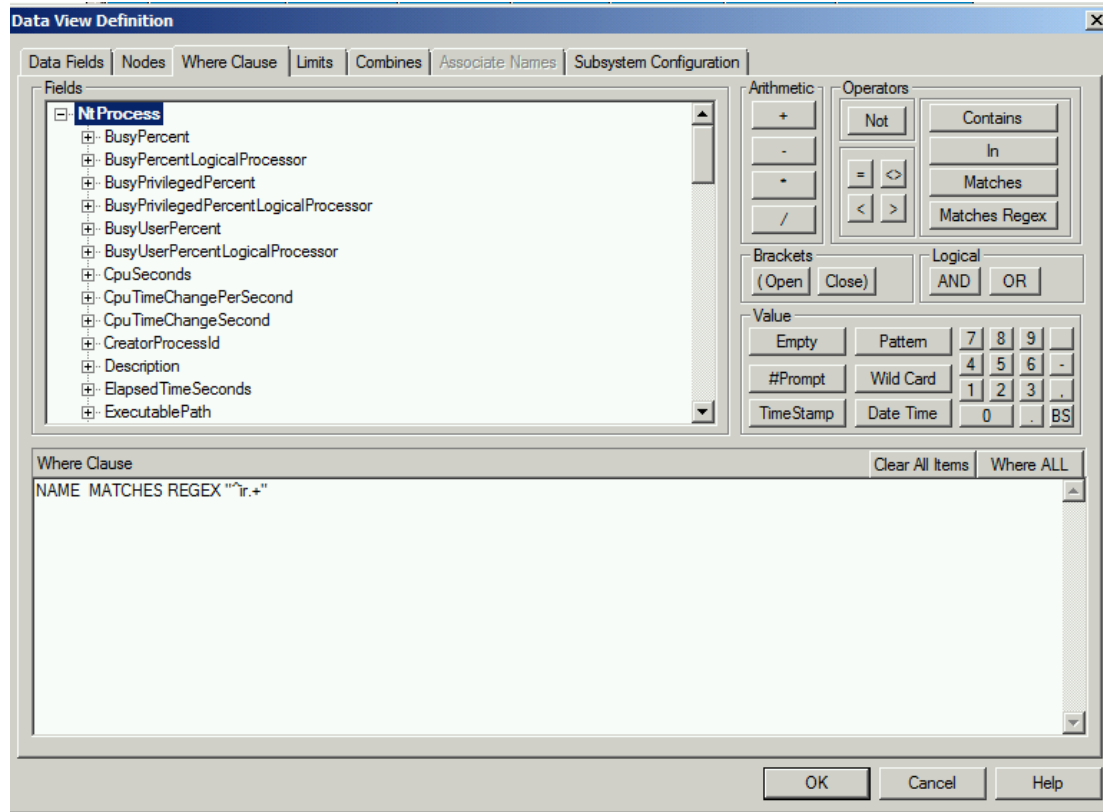


# Exercise 1: Data Filtering

- Data Filtering using Regex
  1. Use the 'MATCHES REGEX' where clause syntax to display only the Prognosis Processes (ie. process names starting with 'ir' only)



# Regex Example







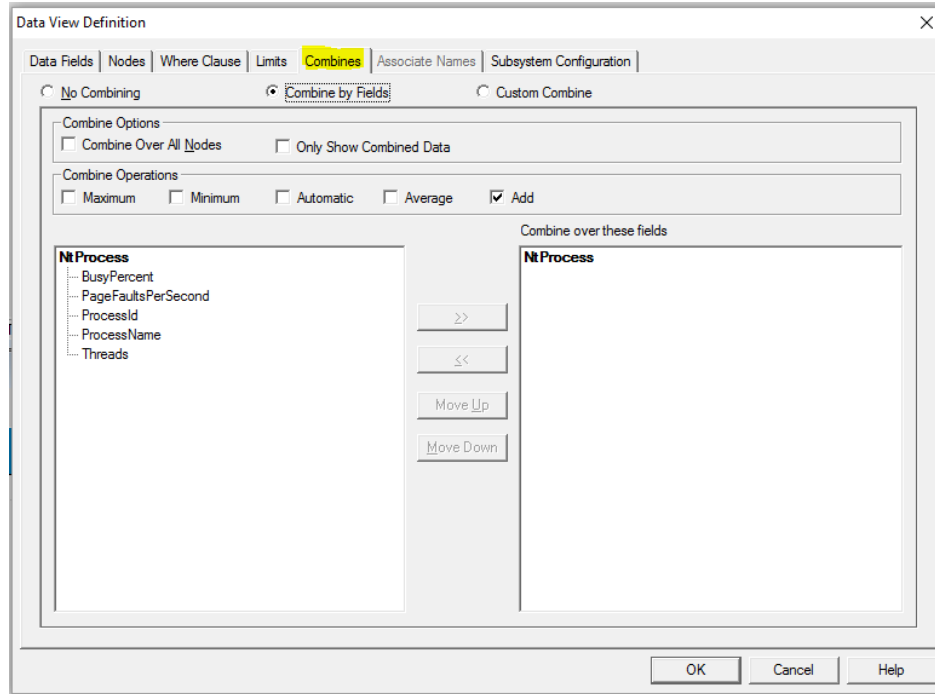
# Regex Examples

- To Find 'ir' at the start of string do `"^ir.+"`
- To Find 'ir' at the end of string do `".+ir$"`
- To Find ir in the middle of string do `".+ir.+"`



# Data Aggregation – Combines

Data View Combines allow aggregation of data – combining multiple rows of data into a new row that can show Average, Max, Min & Summation of numerical values.





# Data Aggregation – Combine by Field

- The 'Combine by Fields' function allows multiple entities to be combined, from a chart or table, of equal value, for example, Jobs or Device types.

	Node Name	BUSY %	Name	PID
1	ISAL-PROGNOSIS	0.20	irnettr	146
2	WNG-PHILLIPM	0.00	irnettr	3888
3	ISUP-KEVINT	0.09	irnettr	760
4	WNG-MARCUSS	0.00	irnettr	820
5	WNG-SEANS	0.00	irnettr	944
6	IDEV-ANDREWD	0.00	irnettr	676
7	ISAL-JEFFL	0.00	irnettr	988
8	ISUP-CHRISM	0.18	irnettr	1208
9	IDEV-DAVIDP	0.00	irnettr	244

Multiple Nodes & Windows NTJOB5(s): 9 Tue Jul 22nd

	Node Name	BUSY %	Name	PID	Combine Type
1	IDEV-ANDREWD	0.00	irnettr	676	
2	ISAL-JEFFL	0.00	irnettr	988	
3	WNG-MARCUSS	0.10	irnettr	820	
4	IDEV-DAVIDP	0.00	irnettr	244	
5	WNG-SEANS	0.00	irnettr	944	
6	ISUP-KEVINT	0.00	irnettr	760	
7	WNG-PHILLIPM	0.00	irnettr	3888	
8	ISUP-CHRISM	0.09	irnettr	1208	
9	ISAL-PROGNOSIS	0.00	irnettr	146	
10	#MultiNode	0.10	irnettr	3888	Max
11	#MultiNode	0.00	irnettr	146	Min
12	#MultiNode	0.02	irnettr	1074	Avg

Multiple Nodes & Windows NTJOB5(s): 9 Tue Jul 22nd 2003 14:38:20

# Data Aggregation – Custom Combines

- The Custom Combine function allows you to combine multiple entities of any value as defined by a Where Clause:

Example combine is from where clause: NAME = "IRNETRTR" or NAME = "IRWASP" in order to combine rows with different values

	Node Name	BUSY %	Name	PID
1	IKNG-MARCUSS	0.10	irnettr	820
2	IKNG-MARCUSS	0.00	irwasp	1864
3	IDEV-ANDREW D	0.00	irnettr	676
4	IDEV-ANDREW D	0.00	irwasp	884
5	ISUP-CHRISM	0.09	irnettr	1208
6	ISUP-CHRISM	0.00	irwasp	1308
7	ISAL-PROGNOSIS	0.30	irnettr	146
8	ISAL-PROGNOSIS	0.00	irwasp	151

Multiple Nodes NTJOBS(s): 8 Tue Jul 22nd 2003 15:14:

	Node Name	BUSY %	Name	PID	Combine Type
1	IDEV-ANDREW D	0.00	irnettr	676	
2	IDEV-ANDREW D	0.00	irwasp	884	
3	<b>IDEV-ANDREW D</b>	<b>0.00</b>	<b>****</b>	<b>780</b>	<b>Avg</b>
4	IKNG-MARCUSS	0.20	irnettr	820	
5	IKNG-MARCUSS	0.10	irwasp	1864	
6	<b>IKNG-MARCUSS</b>	<b>0.15</b>	<b>****</b>	<b>1342</b>	<b>Avg</b>
7	ISAL-PROGNOSIS	0.70	irnettr	146	
8	ISAL-PROGNOSIS	0.00	irwasp	151	
9	<b>ISAL-PROGNOSIS</b>	<b>0.35</b>	<b>****</b>	<b>148</b>	<b>Avg</b>
10	ISUP-CHRISM	0.28	irnettr	1208	
11	ISUP-CHRISM	0.00	irwasp	1308	
12	<b>ISUP-CHRISM</b>	<b>0.14</b>	<b>****</b>	<b>1258</b>	<b>Avg</b>

Multiple Nodes NTJOBS(s): 8 Tue Jul 22nd 2003 15:21:30



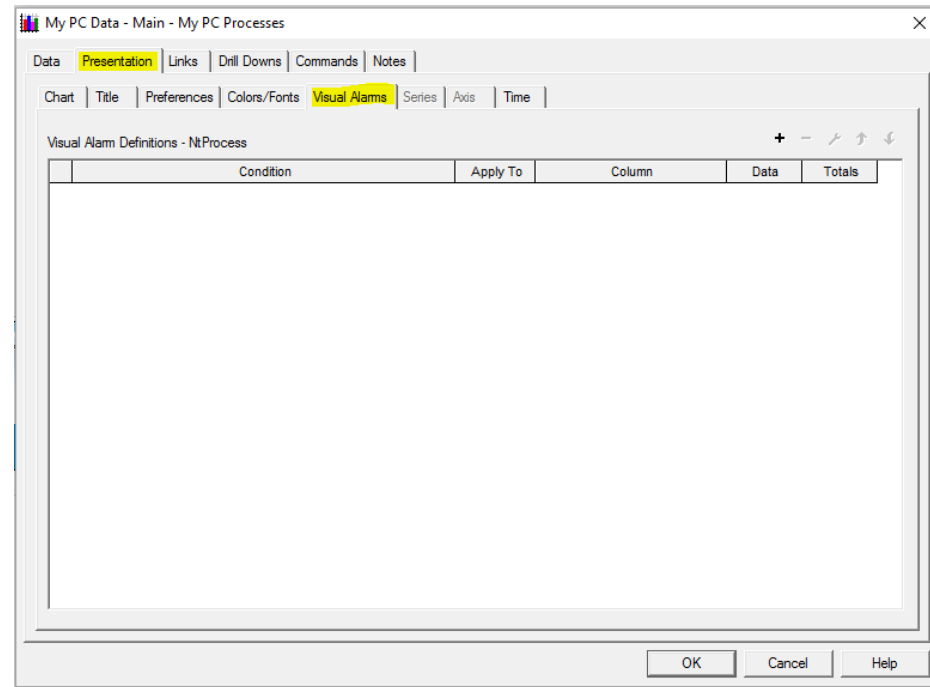
# Exercise 2: Data Aggregation

- Simple 'Custom Combine' Row
  1. Produce an additional row of data in the 'My PC Process' window that will display the sum of the 'BUSY %' value for all process being displayed.



# Visual Alarms

Visual Alarms allows us to display metrics in different colours based on different conditions. This can be used to highlight potential issues visually.





# Visual Alarms

The Visual Alarms feature is only applicable to tabular style charts. It provides the ability to show rows, columns or individual cells in selected colors based upon matching Where Clause conditions.

PID	Threads	▼ Busy %	Name	Faults/s	Private	Virtual
2036	6	76.19	WINWORD	0.00	23.84	319.14
1952	4	9.69	nsp	0.09	25.25	91.60
1992	6	9.39	irqui	0.09	20.23	83.48
			0.89 explorer	0.09	6.62	59.41
			0.49 imetr	3.59	4.93	34.15
			0.39 CSRSS	0.00	1.32	19.85
			0.28 iravcol	0.00	3.53	34.22
			0.19 irdllcol	0.00	8.48	67.85

Visual Alarms set on the Busy% field,  
in this example the orange color  
indicates CPU Busy >50%, green indicates  
CPU Busy <50%



# Exercise 3 : Visual Alarm

- Apply Conditional Visual Alarm
  1. Make any row for a process red if its BUSY % > 1% and GREEN if its BUSY % < 1%.





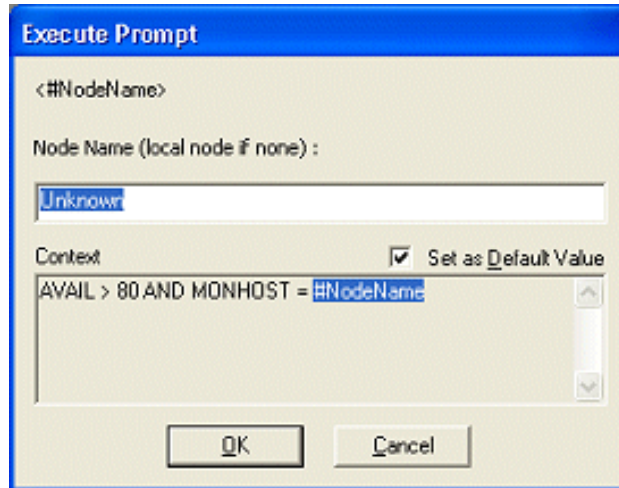
# Prompts

Prompts are used to pass values between displays. They allow us to display & filter data dynamically.

Syntax:

- #<PromptName> (ie. #ProcessName)

The Prompt name can be set to be whatever you want & are defined when you use them.





# Exercise 4 : Drilldowns

- Drilldown with Prompt value passing
  1. Create a new display that shows only 1 process details and displays all its fields based on a prompt value
  2. Create a **drilldown from the Process ID** field of the main display so that it navigates to the new display using & shows details for just that one process



# Exercise 5 : Publish To Web

- Make Dashboard available in WebUI
  1. Publish the two dashboards to web
  2. Create a Key Displays Link to the first dashboard so we can navigate to it from WebUI



# Tips and Tricks

- Issues uploading display to web?
  1. Open CMD as Administrator and type 'IISRESET' on the server
  2. Clear your browser cache if your updated display is not showing
  3. Rename your modified Display before you upload

Questions?





# Test Your Knowledge

- What are three display related use cases for using where clause filtering?
  - Conditional Visual Alarms
  - Building a Flux Capacitor
  - Conditional User Defined Fields
  - Removing unwanted data from being displayed



# Test Your Knowledge

- What display property can you use if you want to aggregate multiple rows of data into one row?
  - Ask Prognosis nicely
  - Build a threshold
  - Press the aggregator button
  - Combines (Combine by field or Custom Combine)



# Test Your Knowledge

- How can you filter data out dynamically or build multi-tier displays?
  - You cannot do it
  - Voice Quality 360
  - Use prompt value passing through drill down navigation
  - Build an Analyst





# Test Your Knowledge

- True or False: You need Programming experience to build Displays and Alerts in Prognosis
  - True – you need to be a Java developer
  - False. Using Where Clauses , anyone can build dashboards



# Recap

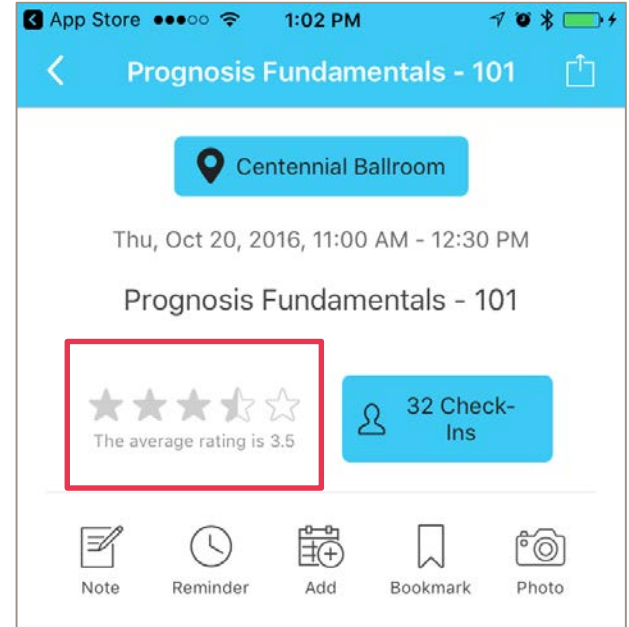
- We've covered:
  - Where Clauses - Data filtering within Prognosis
  - Combines - Data Aggregation within Prognosis
  - Creating Visual Alarms
  - Uploading Displays to the WebUI
  - Tips and Tricks for troubleshooting Upload to Web issues

More information can be found in the Prognosis online help under "System Functions > Displays"



# Next Steps

- Please Rate the Class
- Take the Knowledge Reinforcement Test
- Log On to [Online.Prognosis.com](http://Online.Prognosis.com) to download slides & ask questions
- *Every class rating gets you a chance to win prizes!*



# Questions?

