

IBM Traveler - Big picture

Introduction

One of the primary goals of GreenLight is to monitor and validate an IBM Traveler environment continuously. The following article should give you a brief overview in which areas GreenLight can deep dive your Traveler Setup.

You are going to find several ideas how you can leverage the power of GreenLight with the data coming from IBM Traveler where visualization and analysis are two important key areas.

Where to find Traveler related Data within GreenLight

Traveler Details

Health Grid

Traveler User Activity

Traveler User Simulation

Traveler HTML Simulation for "action=getStatus"

Report

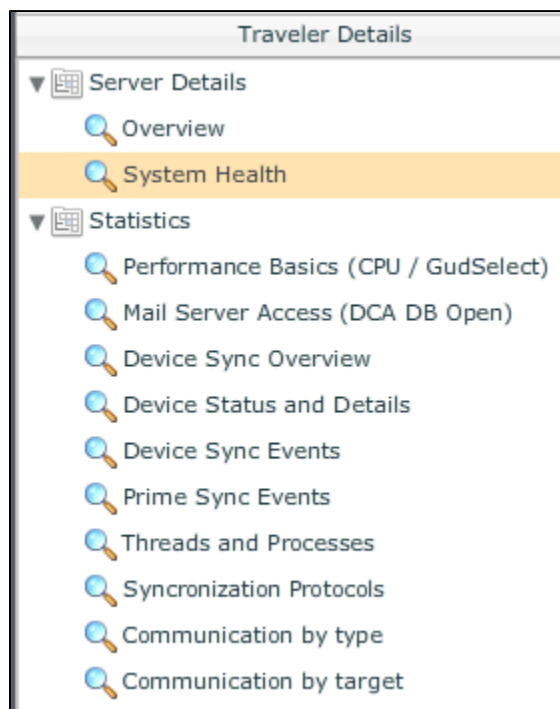
Charting

Alerting

Traveler Details

Whenever you have a *Domino Statistic Sensor* active for a Traveler Server, you are going to get a lot of *Traveler Details*

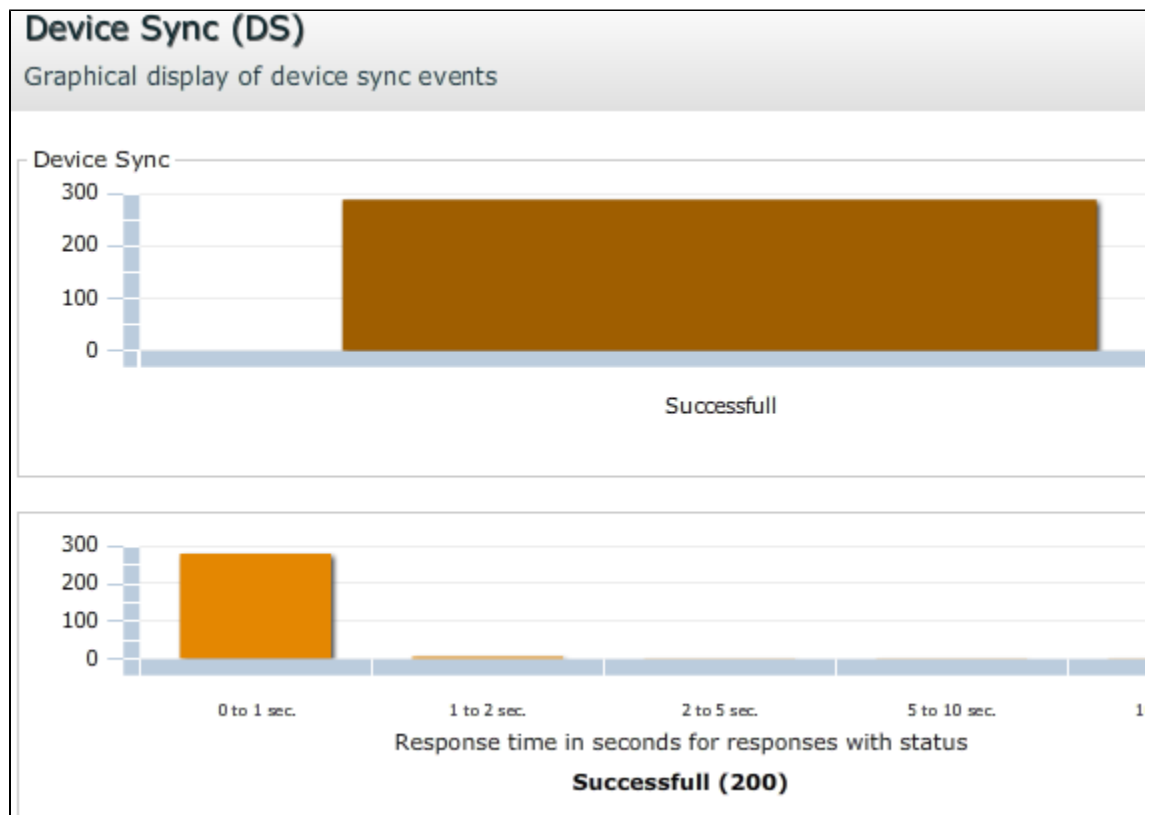
- Double click on a Traveler Server (Health Grid)
- Click on *Traveler Details*
- The *Statistics* category provides you with the following output



- Performance Basics (CPU / GudSelect): Gives you insight information about the CPU utilization and about "lookups against Traveler's internal databases
- Mail Server Access (DCA DB Open): Histogram Information of how much time is spent to open a database on a given Mail Server

Mail Server Access (DCA DB Open)										
Time spent to open a database on the given Domino mail server										
Export CSV ...		Show History ...		2 Mail Servers						
Status	Traveler Server	Mail Server		0 to 1 sec.	1 to 2 sec.	2 to 5 sec.	5 to 10 sec.	10 to 30 sec.	30 to 60 sec.	60 to
⊖	jadin/traveler/panagi	cronus/panagendi	124.215	37	19	9	3	1		

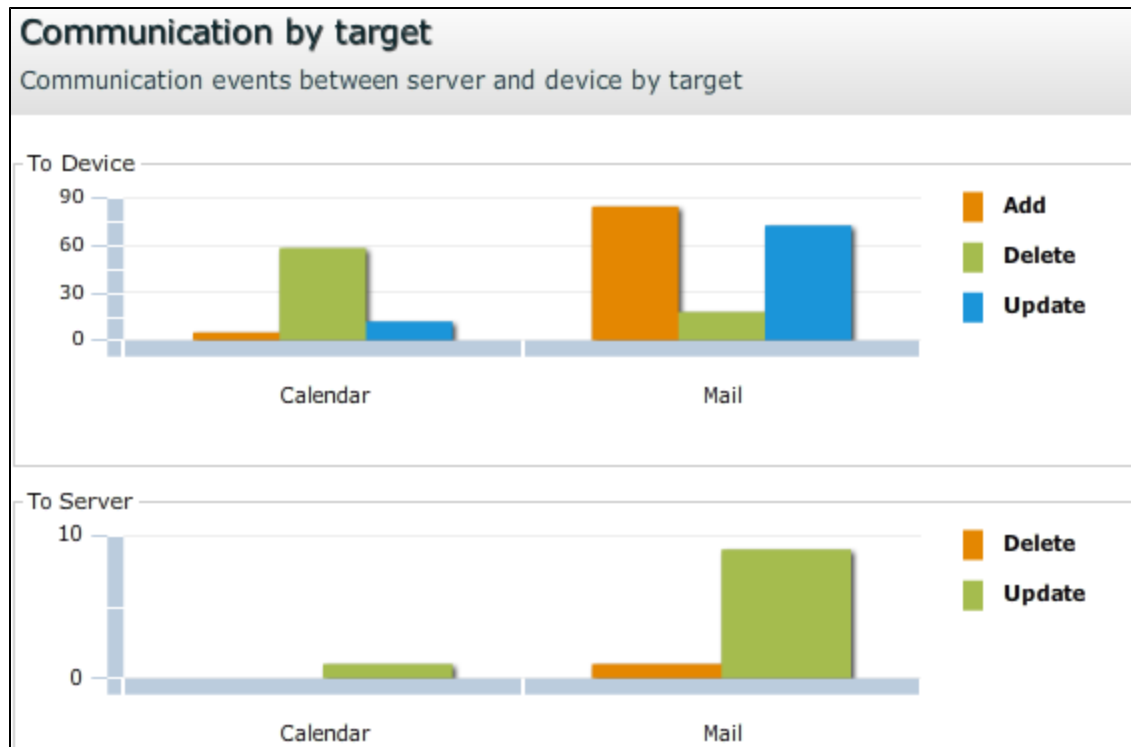
- Device Sync Overview: detailed information coming from the Traveler User Activity Sensor (see below)
- Device Status and Details: Device and User Information (e.g what device User X is using and what is the sync status)
- Device Sync Events: shows you the histogram of successful sync's. In order to see the histogram underneath of the bar-chart, just click on "Click on a column in the chart...."



For the "successful" information we make use of the following statistics

Traveler.DeviceSync.Time.Histogram.200.000-xxx

- Prime Sync (PS) shows you the histogram information for the mail DB sync
 - e.g. Traveler. PrimeSync.Time.Histogram.200.000-xxx
- Messages gives you an overview of how many messages have been sent/received via different types (Active Sync vs. HTTP)
- Threads and Process will depict you information concerning the different traveler threads
- Communication by type shows you what type (mail, calendar, ...) has shown what kind of activity (add, delete, updated) whereas the Communication by target shows you the other way around



Health Grid

Depending on how you have configured your Health Grid you can find relevant Traveler Information there as well. For further information please check out the following kbase article.

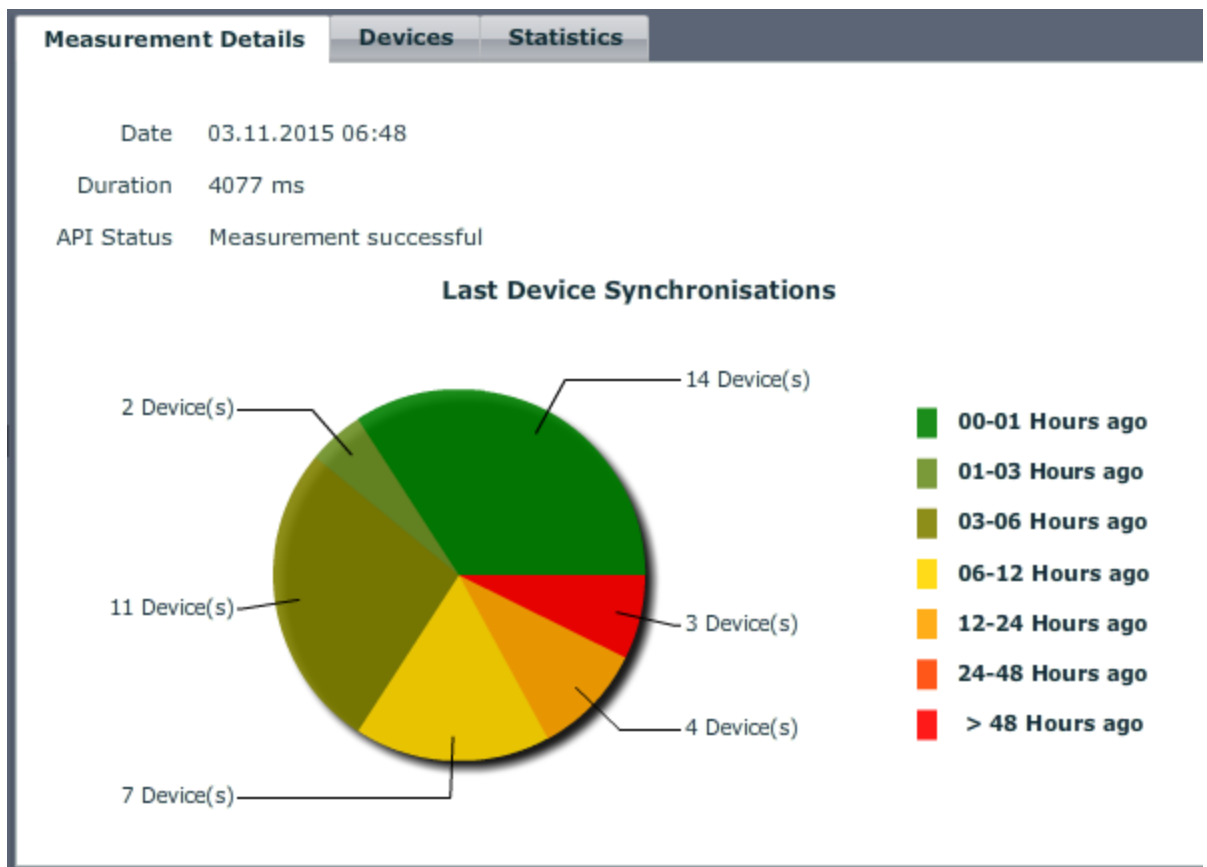
IMPORTANT: you can build individual Health Grid Dashboards for each GreenLight User!

<http://kbase.panagenda.com/display/GL2KB/IBM+Traveler++monitoring+HTTP+threads+vs.+Devices+Total>

Traveler User Activity

By using the *Traveler User Activity Sensor* you get the overview of how many devices have synced/not synced within a certain time period. Having a lot of devices not synced for more than 2 days indicates clearly that there is an issue from a connectivity perspective.

- Double click on the Traveler Server
- Click on Open Sensor Details
- Click on the Traveler User Activity Sensor
















-On the Devices Tab you will find vital information about devices/users/sync state

Measurement Details **Devices** **Statistics**

Export CSV ... 41 Dev

Filter ...	Filter ...	Filter ...	Filter ...	Filter ...	Filter ...
Last Sync	Last Sync ...	Device ID	User	OS	Hardware
over 48 hours	Thu, 29. Oct 2015	IBM_IOS_777A5	c	Apple iOS 9.1	iPhone 5S
over 48 hours	Fri, 30. Oct 2015	IBM_IOS_52045	t	Apple iOS 9.0.2	iPad 2G
over 48 hours	Fri, 30. Oct 2015	US5AA7JST17IH	r	Apple-iPhone7C	Apple-iPhone7C
12-24 hours	Mon, 02. Nov 2015	Android_5131ab	c	Android 5.0.1	samsung GT-I9
12-24 hours	Mon, 02. Nov 2015	Android_ff2e7e5	e	Android 5.0	samsung SM-G
12-24 hours	Mon, 02. Nov 2015	Android_5ee6d8	k	Android 5.1.1	samsung SM-G
12-24 hours	Mon, 02. Nov 2015	FG4DVTME9D7B	s	Apple-iPhone7C	Apple-iPhone7C
06-12 hours	Mon, 02. Nov 2015	N28FE7NJ154M3	a	Apple-iPhone7C	iPhone 6
06-12 hours	Mon, 02. Nov 2015	2C1NAUG7KD39	f	Apple-iPhone7C	Apple-iPhone7C
06-12 hours	Mon, 02. Nov 2015	AppIDMPJD1ASF	f	Apple-iPad3C4/1	Apple-iPad3C4
06-12 hours	Tue, 03. Nov 2015	S2TLBIDUO5691	l	Apple-iPhone7C	Apple-iPhone7C
06-12 hours	Mon, 02. Nov 2015	A123GPGCOD6E	r	Apple-iPhone7C	iPhone 6
06-12 hours	Tue, 03. Nov 2015	Android_e5b732	r	Android 4.4.2	samsung GT-I9

-On the Statistics Tab all important Stats coming from this sensor are listed (vip user info, users total - pool,...)

Measurement Details Devices Statistics		
List View ▼	Favorites Only <input type="checkbox"/>	Filter
★	Key	Value
★	 greenlight.traveler.lastsync.under48h.numdevices.vip.users	a
★	 greenlight.traveler.lastsync.under48h.pct	92
★	 greenlight.traveler.lastsync.under6h.numdevices	27
★	 greenlight.traveler.lastsync.under6h.numdevices.vip	5
★	 greenlight.traveler.lastsync.under6h.numdevices.vip.users	a
★	 greenlight.traveler.lastsync.under6h.pct	65
★	 greenlight.traveler.targets.available	1
★	 greenlight.traveler.targets.pctavailable	100
★	 greenlight.traveler.targets.total	1
★	 greenlight.traveler.users.numdevices.1	24
★	 greenlight.traveler.users.numdevices.2	4
★	 greenlight.traveler.users.numdevices.over2	3
★	 greenlight.traveler.users.total	31

Traveler User Simulation

With the following "simple" example you can simulate and monitor an e-mail delivery to an active mobile device

<http://kbase.panagenda.com/display/GL2KB/IBM+Traveler+User+Simulation>

Traveler HTML Simulation for action=getStatus

With the following End2End Simulation you check if your Traveler environment is accessible/reachable from external.

This single action checks a bunch of things:

- Traveler Access
- is Traveler Task active
- is HTTP task active
- is the backend Database reachabled
- is the Mailserver for the authenticated user available

HTML User Simulation

Name

Enabled ☒ [Show Schedule](#)

Settings Targets Actions Schedule

Authentication Method *

Protocol *

Port *

Timeout * ms

Username *

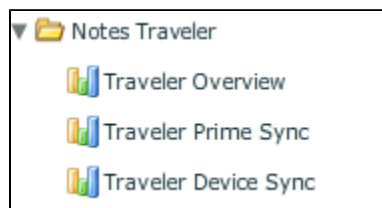
Password *

Check URL

Save & Close Discard Changes

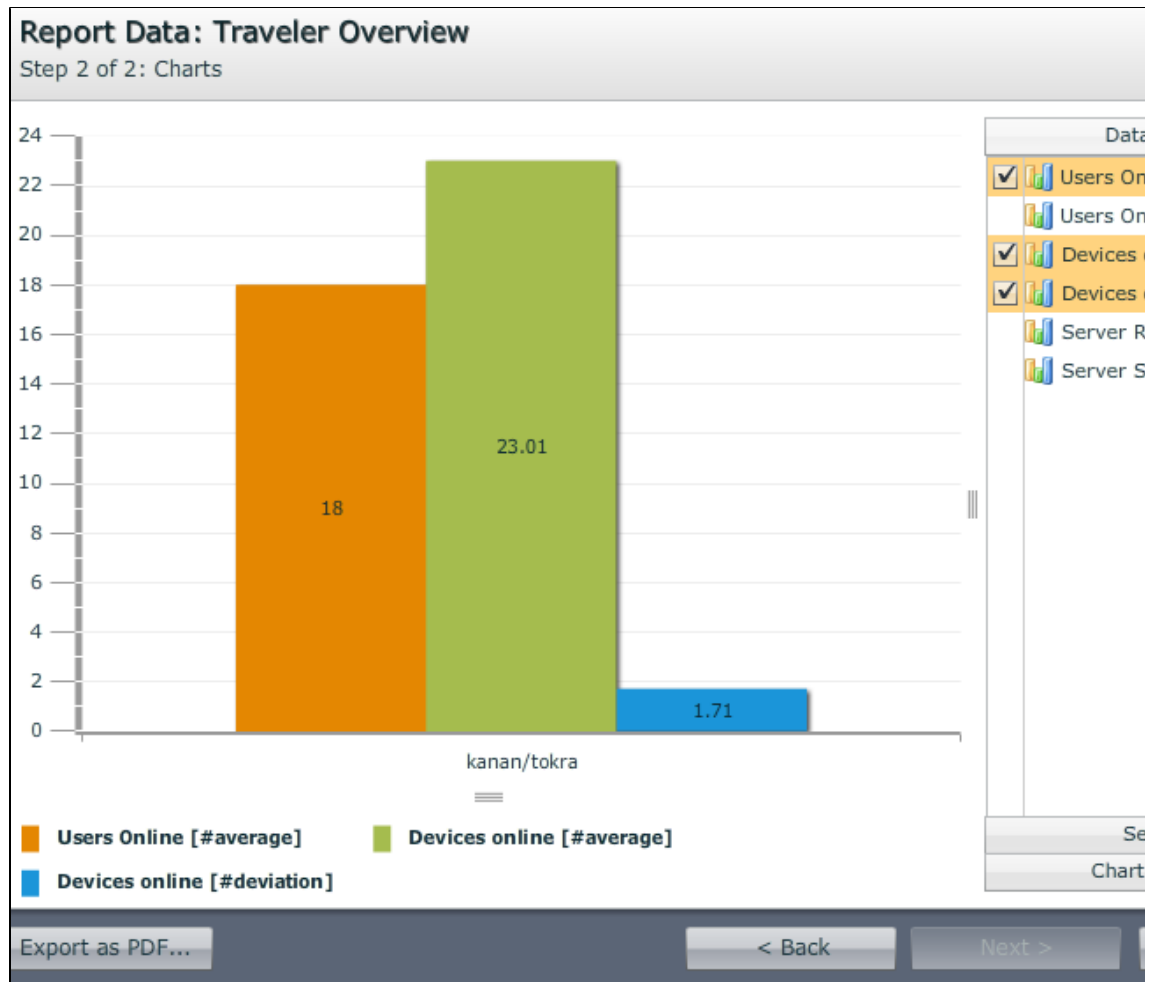
Report

By using GreenLight Reports (scheduled or on-demand) you can make use of three different templates.



They contain relevant information especially whenever you have internal SLA's in place













Example: Traveler Overview



Charting

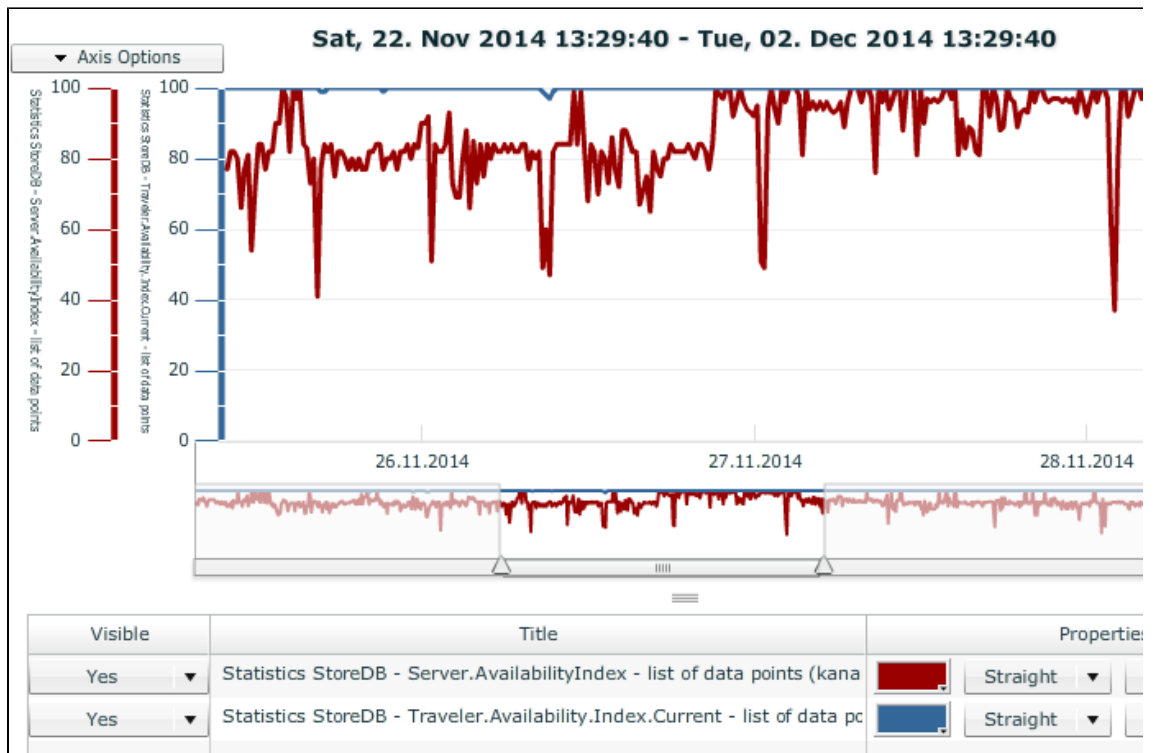
By using the powerful charting engine of GreenLight, you can generate whatever chart you want/wish. For instance: Line-charts to cover CPU utilization. Bar-charts to cover different Histograms of IBM Traveler

Find below some Ideas of Charts (if you need detailed information of what parameters i have used for those charts, feel free to let us know)

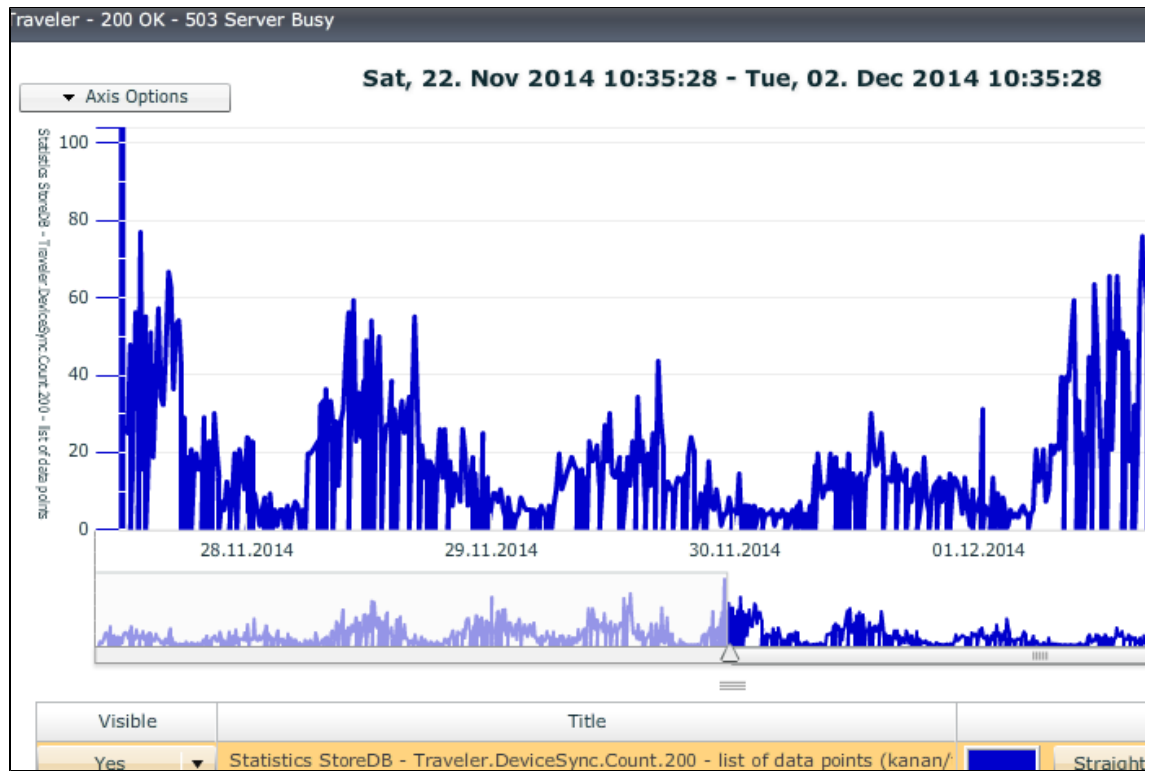
-  Traveler - AI Histogram
-  Traveler - Availability (server - traveler)
-  Traveler - CPU
-  Traveler - CPU-Memory-Java
-  Traveler - DB lookup
-  Traveler - DB lookups
-  Traveler - DCA - Analysis
-  Traveler - HTTP Workers
-  Traveler - JAVA
-  Traveler - Mail-Calendar TO Device
-  Traveler - Mails
-  Traveler - Namelookup

Examples

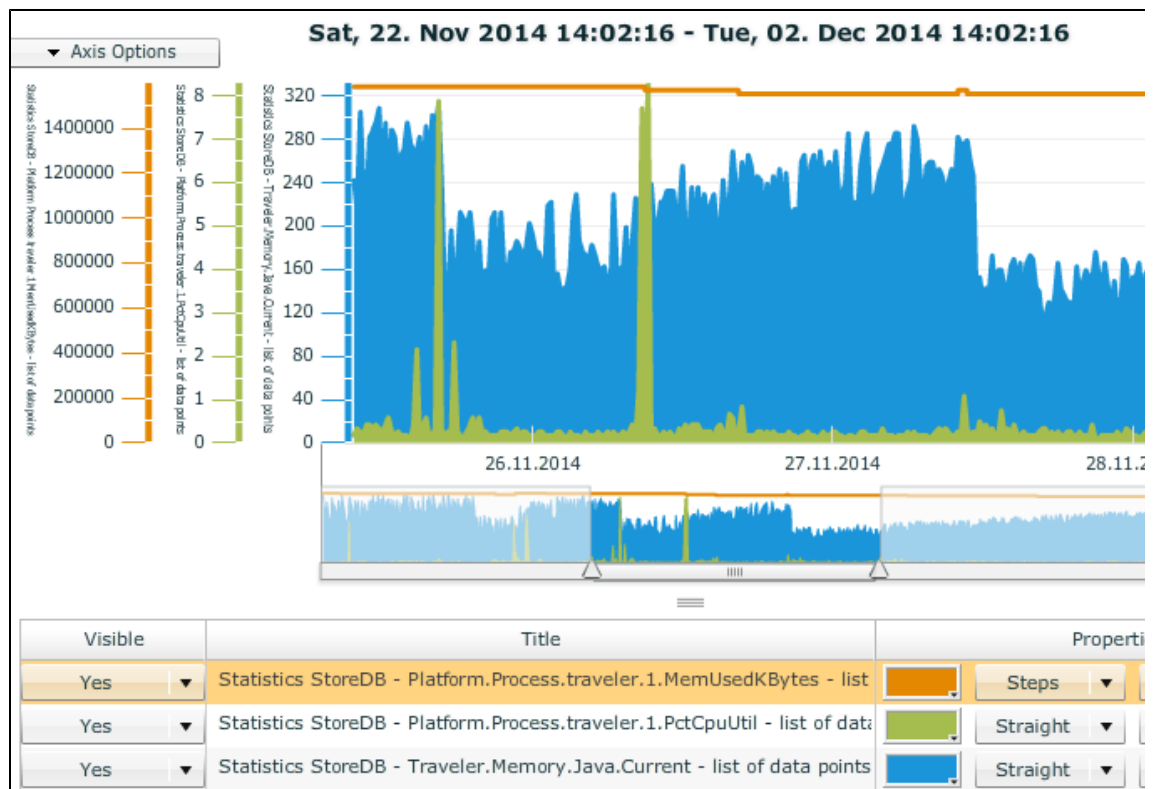
Traveler Availability (Domino Server Availability vs. Traveler Availability)



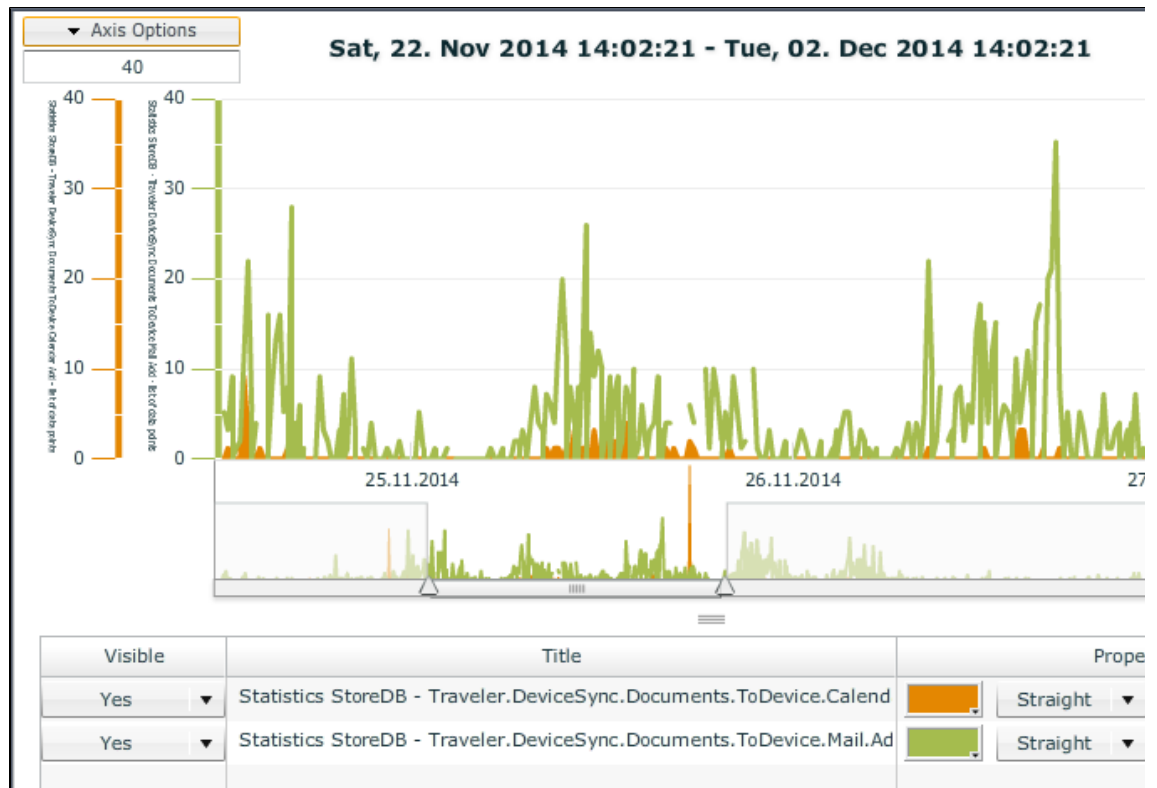
Successful Device Syncs (200) vs. Server busy (503)



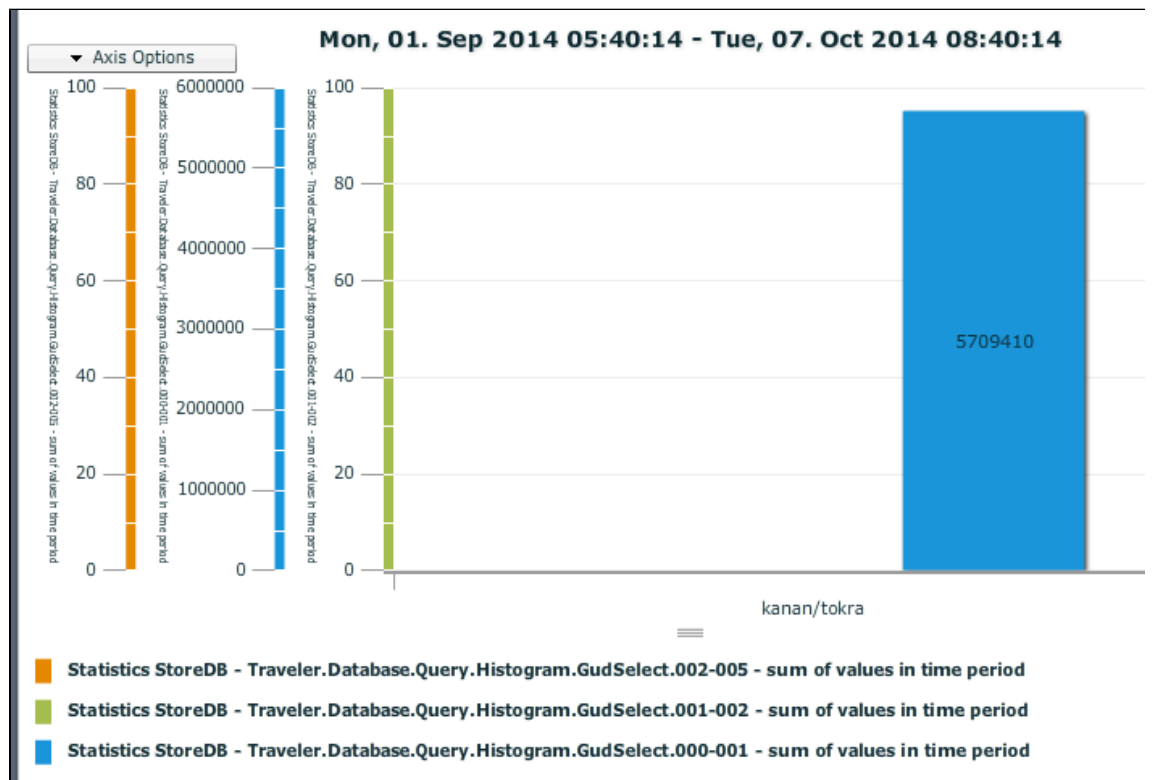
CPU Utilization vs. free memory vs. Traveler.Memory.Java.Current



Calendar docs vs. Mail docs TO Device



Histogram of DB queries



Alerting

You can utilize ANY Traveler Statistics for your notifications. To give you just one powerful example, checkout the following kbase article:

<http://kbase.panagenda.com/display/GL2KB/Action+Example+-+http.workers+vs.+devices>

You can imagine what other Usecases exists 😊

Conclusion

A lot of Information can be used for monitoring/analyzing an IBM traveler setup.