Informatics, an automatic computer reporting system

by Dave Linnenbank

Any data for local workstations can be reported with this scheme, such as machine serial numbers, software versions, battery levels for Bluetooth peripherals, etc. etc.

1) Local "Server"

Holds a JSON configuration file, containing:

- Rules for Informatics
- Manifest(s) of commands to run

2) Local Workstations

The actual *Informatics* applet lives here:

- Informatics automatically runs at boot
- The JSON config file is downloaded, and command manifests are parsed
- If the rules are met, commands are run
- Results are then passed to Google Form

3) Google Form Document

Contains fields for data coming from *Informatics*. The data is received in the background and is accessed by the Google Sheet for web display.

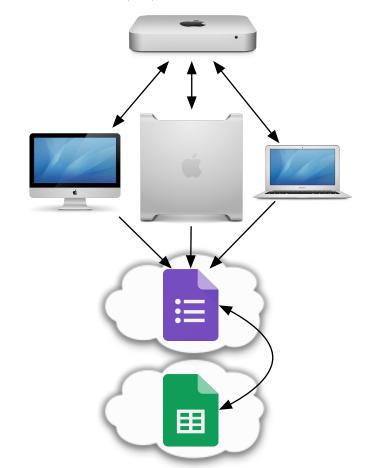
4) Google Sheet Document(s)

Accesses the Google Form for all relevant information. The information is then interpreted, heavily formatted (to make clear what is most important at a glance), and served as web pages.

Summary Example

DSNY Software by Classroom												
All Rooms	Room 1 Ro	om 2 Room	3 Room 4	Room 5	Room 6 DJ	Room Vers						
	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6						
Station Count		7 13	1	3 1	5 16	21						
Thunderbolt	1 port	1 port	1 port	2 ports	2 ports	2 ports						
USB version	USB 2.0	USB 2.0	USB 2.0	USB 3.0	USB 3.0	USB 3.0						
FireWire 800	1 port	1 port	1 port	none	none	none						
Mac OS	10.9.3	10.9.3	10.9.3	10.9.3	10.9.3	10.9.3						
Live (64 bit)	9.5	9.5	9.5	9.5	9.5	9.1.7						
Max For Live	6.1.10	6.1.10	6.1.10	6.1.10	6.1.10	6.1.10						
Logic Pro X	10.2.0	10.2.0	10.2.0	10.2.0	10.2.0	10.1.1						
Reason	7.1.1	7.1.1	7.1.1	7.1.1	7.1.1	7.1.1						
Manadalan	0.0.4		0.0.4		0.0.4	!						

In this example, the hardware ports, software versions, etc., are shown for the primary station in various rooms. When text is shown in red, that value is not consistent for all stations in the room.



Individual Station Example

DSNY Software by Classroom													
All Rooms F	Room 1 Ro	oom 2 Roo	om 3 Roor	m 4 Roon	n 5 Room	6 DJ Roo	m Versio	Tracking					
DSNY-LAB-R5	TEACH	S01	S02	S03	S04	S05	S06	S07					
Thunderbolt	2 ports	1 port	1 port	1 port	1 port	1 port	1 port	1 port					
USB version	USB 3.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0					
FireWire 800	none	1 port	1 port	1 port	1 port	1 port	1 port	1 port					
Mac OS	10.9.3	10.9.3	10.9.3	10.9.3	10.9.3	10.9.3	10.9.3	10.9.3					
Live (64 bit)	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5					
Max For Live	6.1.10	6.1.10	6.1.10	6.1.10	6.1.10	6.1.10	6.1.10	6.1.10					
Logic Pro X	10.2.0	10.2.0	10.2.0	10.2.0	10.2.0	10.2.0	10.2.0	10.2.0					
Reason	7.1.1	7.1.1	7.1.1	7.1.1	7.1.1	7.1.1	7.1.1	7.1.1					
Maschine	2.3.1	2.4.0	2.4.0	2.4.0	2.4.0	2.4.0	2.3.1	2.3.1					

In this example, the same data is shown for a single room, with the primary (*TEACH*) station displayed at left. User station values that match the primary station are a faint gray, allowing the reader to quickly scan for differences.