

# Nlyte DCIM Software Integration

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## The Problem

SLAC has hundreds of thousands of dollars' worth of networking and computing assets. These assets are scattered throughout the campus and needs to be tracked and maintained. These assets range from old to new hardware making the current inventory databases deprecated. In some instances, it is difficult to find, visualize, and design data infrastructure.

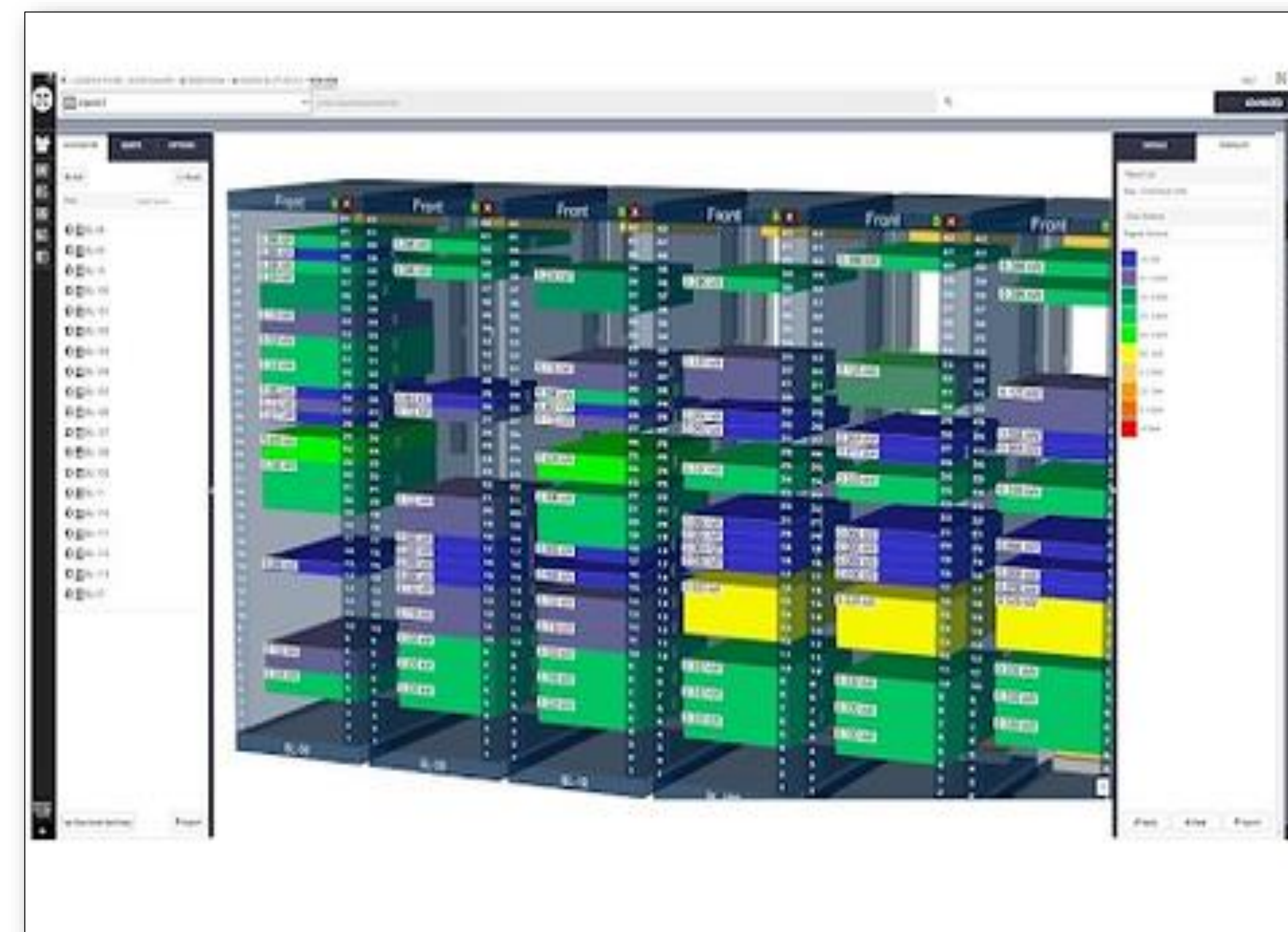
## The Solution

An optimal solution to this issue is the implementation of a DCIM. DCIM stands for Datacenter Infrastructure Management, but it covers far more than just datacenters. The Nlyte DCIM software is a web-based software that allows users to model and track networking and computing assets in real time. It will give TID and ECS the ability to react in real time to errors and visualize deployments of new assets. It will also allow us to see other aspects like network connections and power consumption. The capabilities of Nlyte will overall improve the structure design, and performance of TID and LCLS.

## The Method

The steps taken to progress the integrations are as follows:

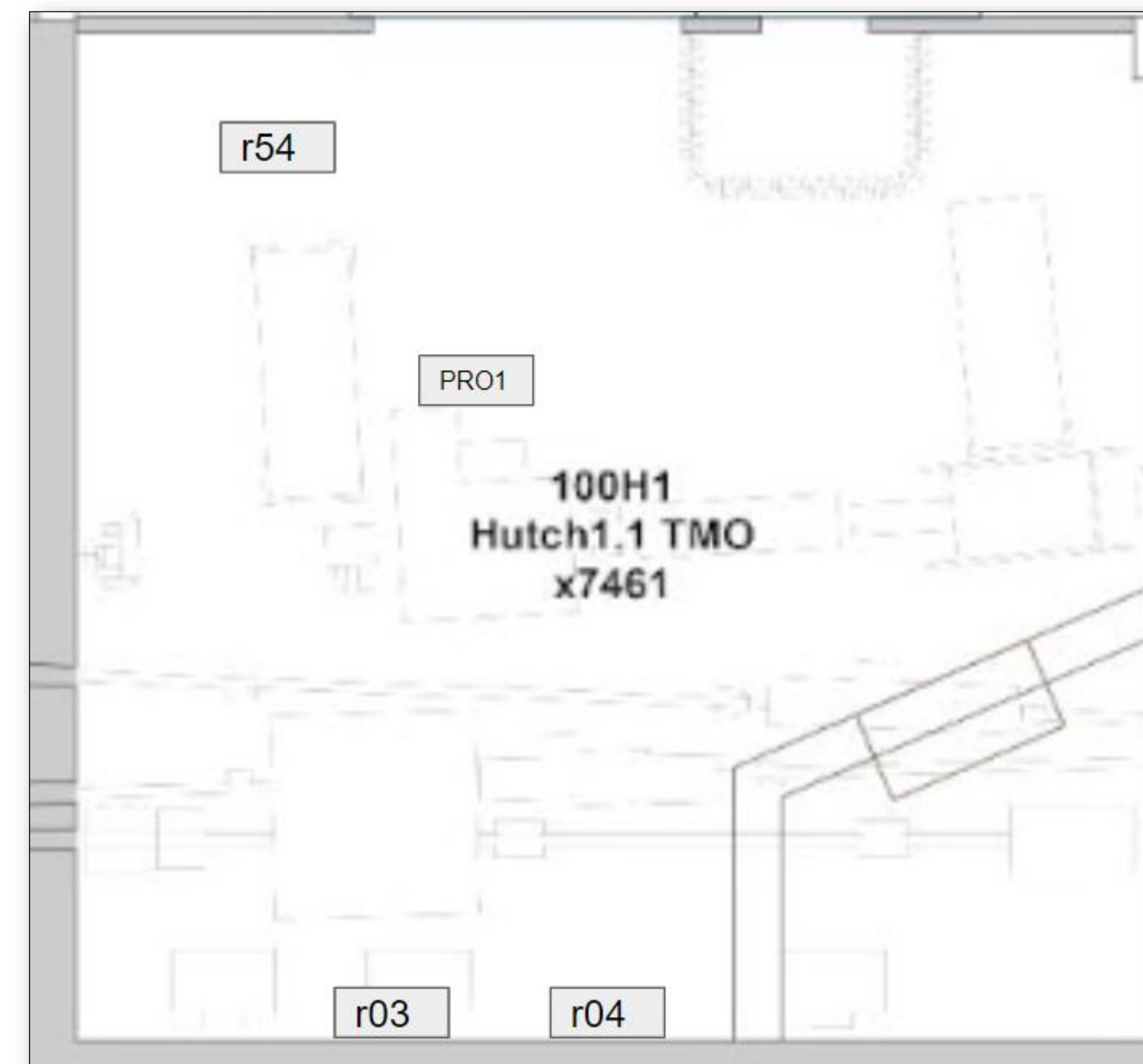
- Visit all network asset locations and put their data in spreadsheets (templates)
- Create rack location blueprints and profiles
- Transfer asset data into Nlyte via spreadsheet
- Interact with Nlyte via the web UI to dynamically make corrections and updates



**Rack Data in Nlyte**

Rack	Device Type	Hostname	Elevation	PC	Network Connection
1	B950-232-R05	CIARA	CTL-LAS-CRUX-SRV01	35	PC98601
2	B950-232-R05	CIARA	CTL-LAS-CRUX-SRV02	34	PC98598
3	B950-232-R05	CIARA	CTL-LAS-CRUX-SRV03	33	PC98608
4	B950-232-R05	CIARA	CTL-LAS-CRUX-SRV04	32	PC98590
5	B950-232-R05	CIARA	CTL-LAS-CRUX-SRV05	31	PC98594
6	B950-232-R05	CIARA	CTL-LAS-CRUX-SRV06	30	PC98600
7	B950-232-R05	CIARA	CTL-LAS-CRUX-SRV07	29	PC98617
8	B950-232-R05	Patch pannel	B950-233-R05-PPL-E40	40	
9	B950-232-R05	Switch	B950-233-R05-ESW-01	39	
10	B950-232-R05	FODU	B950-233-R05-FOD-01	42	
11	B950-232-R05				
12	B950-232-R04	CIARA	CTL-CRUX-MOT-01	17	PC98609
13	B950-232-R04	CIARA	CTL-CRUX-VAC-01	16	PC98614
14	B950-232-R04	CIARA	CTL-RIX-CRUX-CAM-01	15	PC98615
15	B950-232-R04	CIARA	DAQ-RIX-ANDOR-01	14	PC98602
16	B950-232-R04	Fodu	B950-233-R04-FOD-01	26	
17	B950-232-R04	FODU	B950-233-R04-FOD-02	24	
18	B950-232-R04	PATCH PANNEL	B950-233-R04-PPL-ETH-01	22	
19	B950-232-R04	SWITCH	B950-233-R04-ESW-01	21	
20	B950-232-R04	PATCH PANNEL	B950-233-R04-PPL-ETH-02	20	
21	B950-232-R04	Patch pannel	SER-RUX-02	12	
22	B950-232-R04				
23					
24	Metal box	Switch			
25					
26	B950-232-R03	CIARA	DAQ-RIX-CCD-01	30	PC101489
27	B950-232-R03	CIARA	CTL-RIX-ORIX-MOT-01	29	PC98656
28	B950-232-R03	CIARA	CTL-RIX-ORIX-VAC-01	28	PC98657
29	B950-232-R03	CIARA	CTL-RIX-ORIX-CAM-01	27	PC98621
30	B950-232-R03	CIARA	CTL-RIX-ORIX-CAM-02	26	PC98653
31	B950-232-R03	Switch	B950-233-R03-B-ESW-01	40	
32	B950-232-R03	PATCH PANNEL		39	B950-233-R03-B-ESW-
33					
34	B950-232-R02	FODU	B950-233-R02-FOD-01		
35					

**Data Collection**



**Rack Location Blueprints**

## Additional

In addition to the progress made on the Nlyte integration, taking the time to physically inspect all the assets controlled by TID and LCLS has allowed us to update our database. The process has allowed us to allocate our assets to their respective areas. The Nlyte initiative is not just about the software, but about keeping our assets up to date, understand our network topology, and design for future deployments.

## Conclusions

Nlyte will provide unmatched value to the overall operations of TID and LCLS. Through this integration process, there will not be any missing or misplaced assets. The capabilities that Nlyte provides will go a long way in improving the overall understanding of our infrastructure. Finally, the ease of use will allow users with no experience understand our complex environment

## Acknowledgments

Special thanks to Rad Kosinski, Omar Quijano, and Julieth Otero for their assistance as well as all the LCLS area managers.