



TYRONE SERVER MANAGEMENT




TYRONE ProServe (FULL-FEATURED SERVER MANAGEMENT SOLUTION)

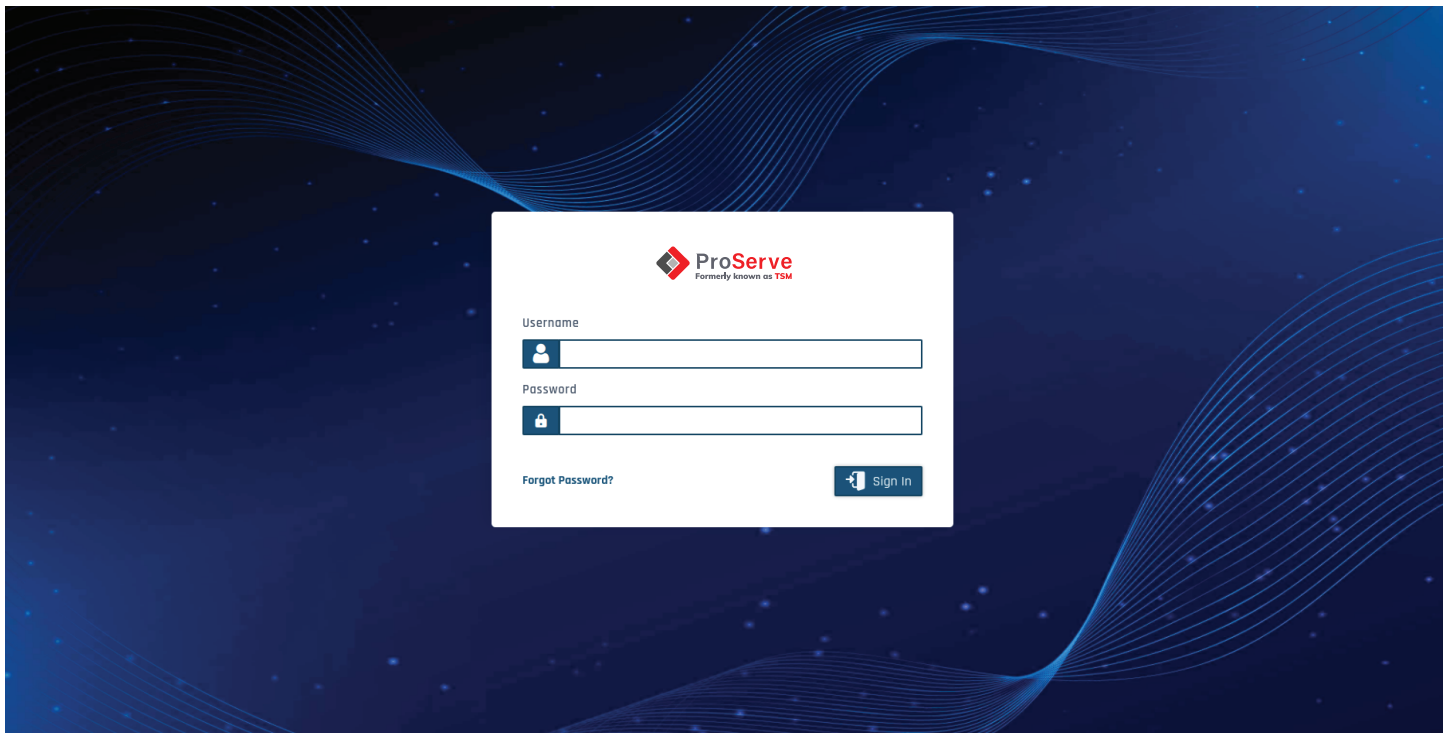
Tyrone ProServe is a suite of scalable and secure systems management solution. It allows IT managers to get remote access of Servers with BMC implementing IPMI and Agent based Management Applications. It allows users to monitor server system's health and to manage critical events of remote systems via GUI, CLI and API's

Key features of **Tyrone ProServe** includes

- IPMI 2.0 Support
- Redfish Support
- GUI, CLI, API's to control IPMI functions
- iKVM (Keyboard, Video, and Mouse)
- Virtual Media Redirection
- 3rd Party Authentication, Multi-Factor Authentication
- BIOS & Firmware update, OS Deployment
- System Management Architecture for Server Management (SMASH) Support

The high level architecture includes:

- Tyrone ProServe management
- Management console
- Network Connectivity LAN/WAN
- BMC Interface via IPMI/LAN Port



Tyrone ProServe detailed Specifications and Features:

1. Discovery and Group Management

Automatically discover provisioned servers within the IP range via out-of-band (agent free/IPMI) and in-band (agent managed) connections. IT managers can then group the discovered servers based on profile.

Host Discovery Wizard [Step 1 out of 3]

Username * Password *

Discovery Type * **IP RANGE** NETWORK RANGE

Start IP * End IP *

Format: 0.0.0.0 Format: 0.0.0.0

Begin Discovery

Host Discovery Wizard [Step 1 out of 3]

Username * Password *

Discovery Type * IP RANGE **NETWORK RANGE**

Network*

Format: 0.0.0.0/0

Begin Discovery

- Supports configuration of systems at DC and DR in High Availability model

Authentication High Availability Configure NTP Configure Email Configure SNMP Manage Alerts Manage Tags RBAC Manage Template

Authentication

Configure Authentication Source

Authentication Source * **LOCAL** **LDAP** AAA

FQDN Server * DNS Server *

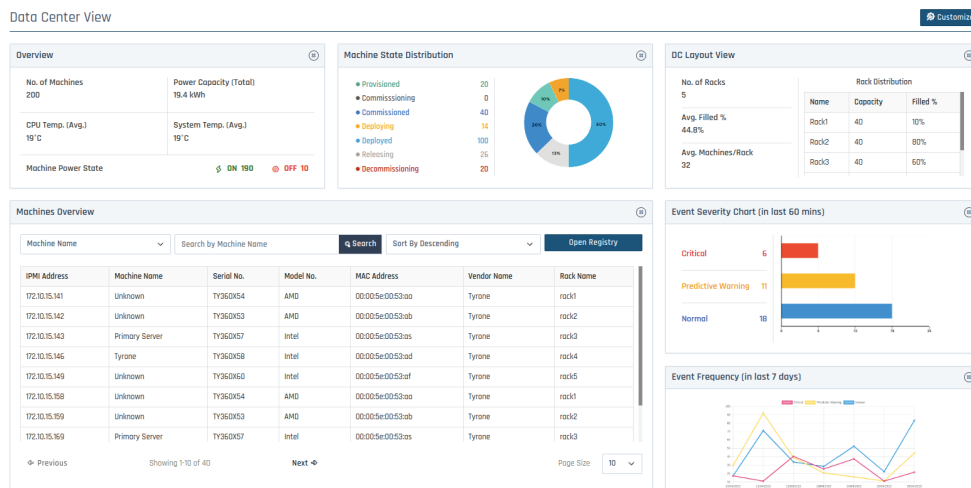
Format: <hostname>.<second-level-domain>.<top-level-domain> Format: 0.0.0.0

Username * Password *

Type your username Type your password

Configure

- Remote accessibility to multiple servers simultaneously for management (scalable to manage upto six thousands servers)



Asset Tracking and Management

Tracking of hardware assets and firmware versions of all managed servers via out-of-band (agent free/IPMI) and in-band (agent managed) connections

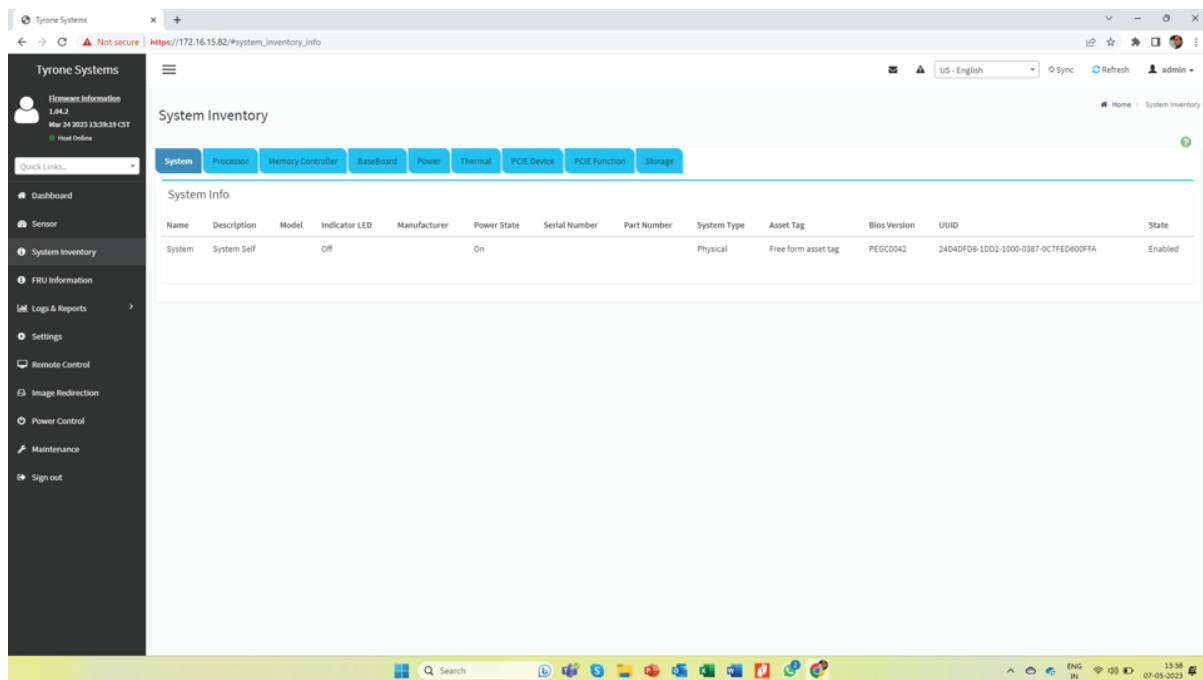
- Asset Tagging based on user assign attributes
- Self Service portal for comissioning /decommissioning, provisioning / deprovisioning capabilities

The screenshot shows the ProServe Settings page. The left sidebar contains navigation links: Dashboard, Host Discovery, Assets Management, Analytics, Logs, and Settings. The main content area is titled 'Settings' and has a sub-header 'Manage Tags'. Below this, there are tabs for Authentication, High Availability, Configure NTP, Configure Email, Configure SNMP, Manage Alerts, Manage Tags (selected), RBAC, and Manage Template. The 'Manage Tags' section is divided into two panels. The left panel, 'Create Tag', has input fields for 'Tag Name' and 'Color', and a 'Create Tag' button. The right panel, 'Tags List', shows a table with columns 'Tag Name' and 'Assigned Machine'. The table lists three tags: 'Primary' (Assigned Machine: 30), 'Secondary' (Assigned Machine: 30), and 'Warning' (Assigned Machine: 30). A 'Delete tags' button is in the top right corner of the table.

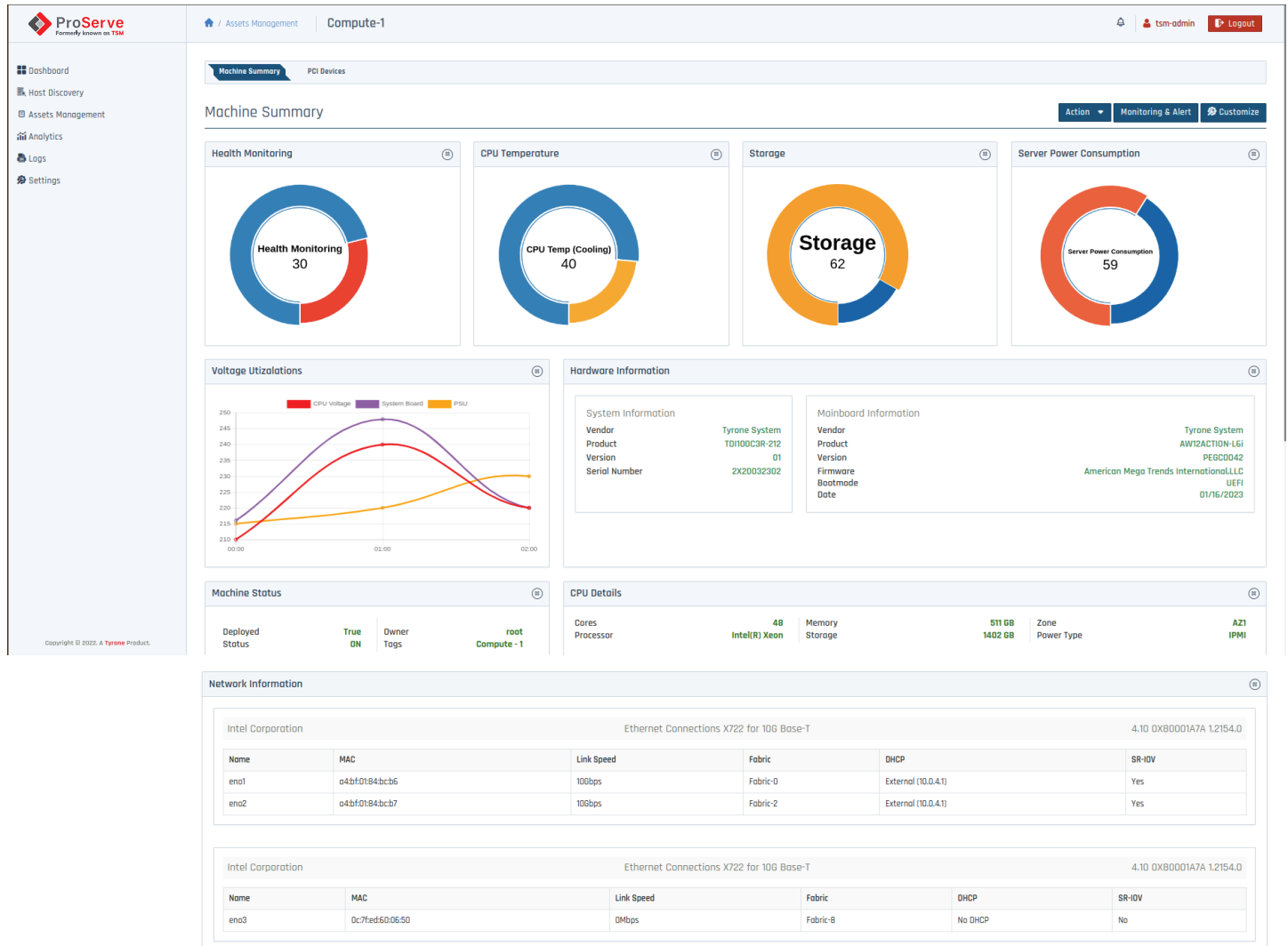
- Graphical overview of host's resources

The screenshot shows the ProServe Assets Management page. The left sidebar contains navigation links: Dashboard, Host Discovery, Assets Management, Analytics, Logs, and Settings. The main content area is titled 'Assets Management' and has a sub-header 'Compute-1'. Below this, there are tabs for Machine Summary (selected) and PCI Devices. The 'Machine Summary' section has a sub-header 'Machine Summary' and a 'Monitoring & Alert' button. The section is divided into four panels: 'Health Monitoring' (donut chart showing 30), 'CPU Temperature' (donut chart showing 40), 'Storage' (donut chart showing 62), and 'Server Power Consumption' (donut chart showing 59). Below these panels, there are two more panels: 'Voltage Utilizations' (line chart showing CPU Voltage, System Board, and PSU over time) and 'Hardware Information' (table showing System Information and Mainboard Information). The 'Machine Status' panel at the bottom shows 'Deployed Status' as 'True ON' and 'Owner Tags' as 'root Compute - 1'. The 'CPU Details' panel at the bottom shows 'Cores Processor' as '48 Intel(R) Xeon', 'Memory Storage' as '511 GB 1402 GB', and 'Zone Power Type' as 'AZ1 IPMI'.

- Inventory details of host system like Processors, Memory, Storage, Networking, and other components



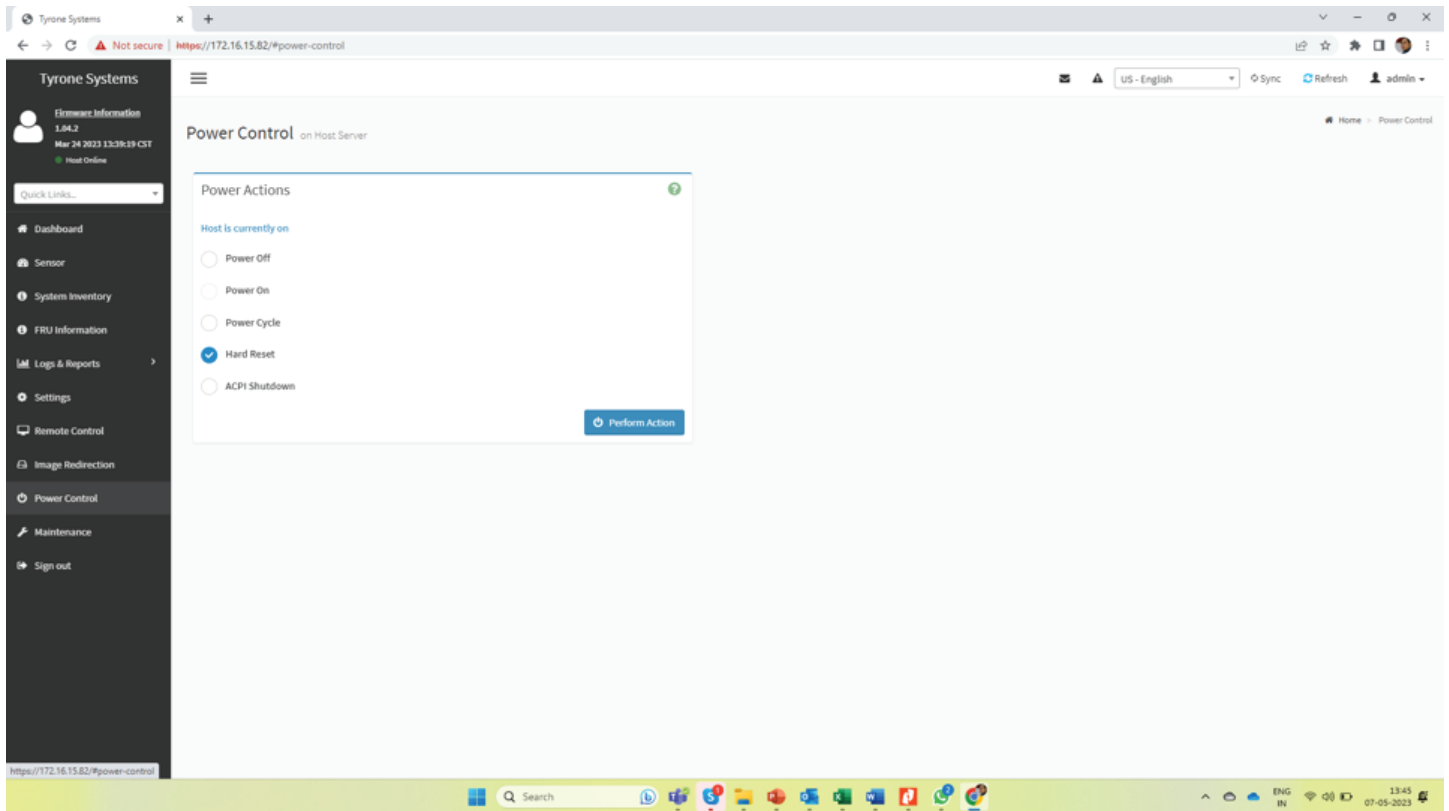
- View System information (firmware versions, server health, diagnostic information, Power statistics etc.)



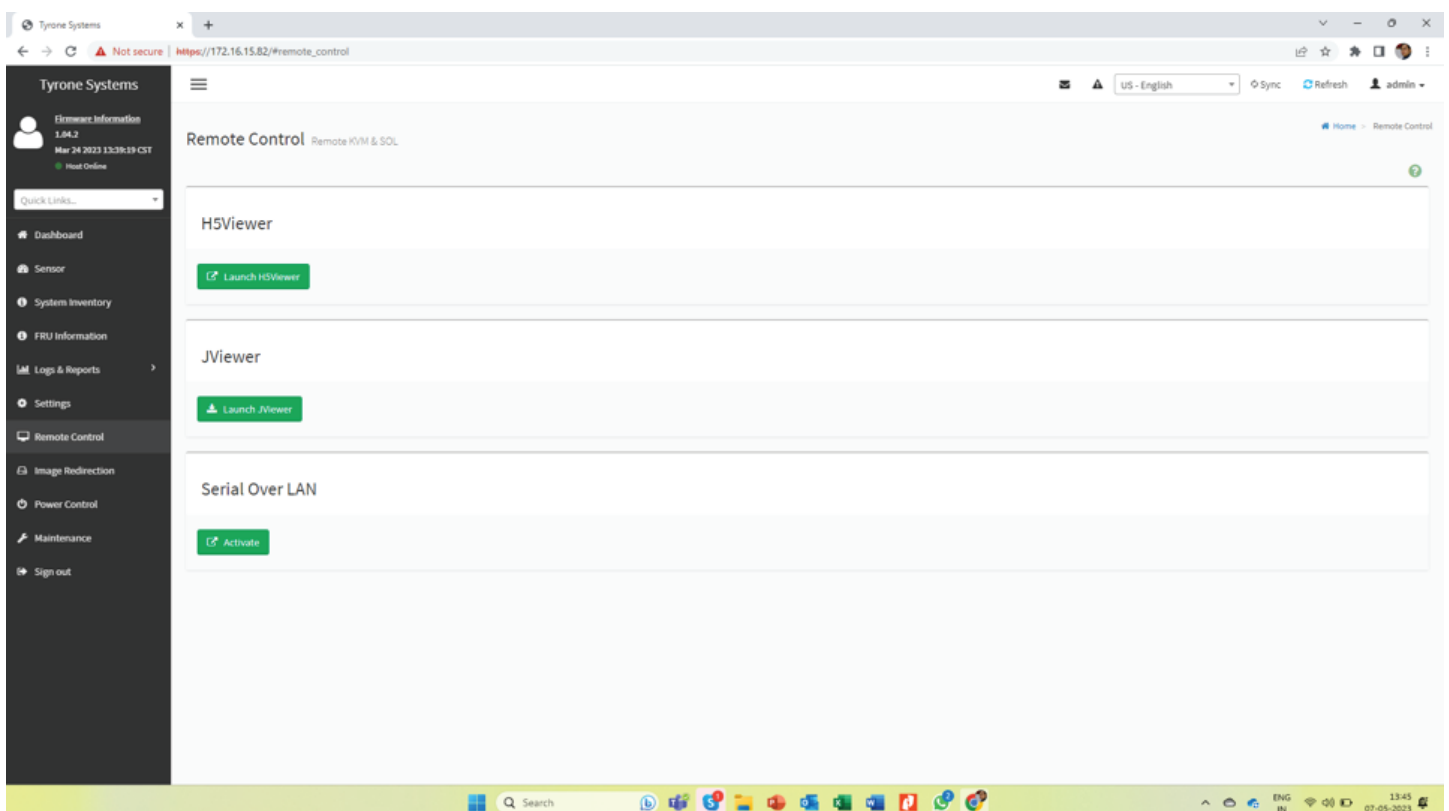
2. Remote Management, Configuration, Provisioning

Remote Management of multiple servers simultaneously for management tasks such as BIOS / firmware / driver update, scheduling, configuration and provisioning etc.

- Power Management (Power ON/Power Off)



- Remotely connection via the iKVM



- Out-of-band BIOS/BMC/Firmware Update
- Life cycle management thru single unified platform and with capabilities of discovery, commissioning, deploying and retiring Servers
- Patch management for drivers, softwares update
- Provisioning with OS image (Ubuntu, CentOS, Windows, RHEL etc.) for profile creation and deployment with the press of a button
- Cloning of Servers based on common Hardware Profile based deployment (simultaneous on multiple systems) and Batch processing using user defined scripts based on Admin policies for updates and deployment and provide user specific templates to carry out simultaneous operations
- Batch processing of using user defined scripts based on Admin policies for updates and deployment
- Provisioning of Power Policies, Profile import/export

ProServe Formerly known as TSM

Assets Management

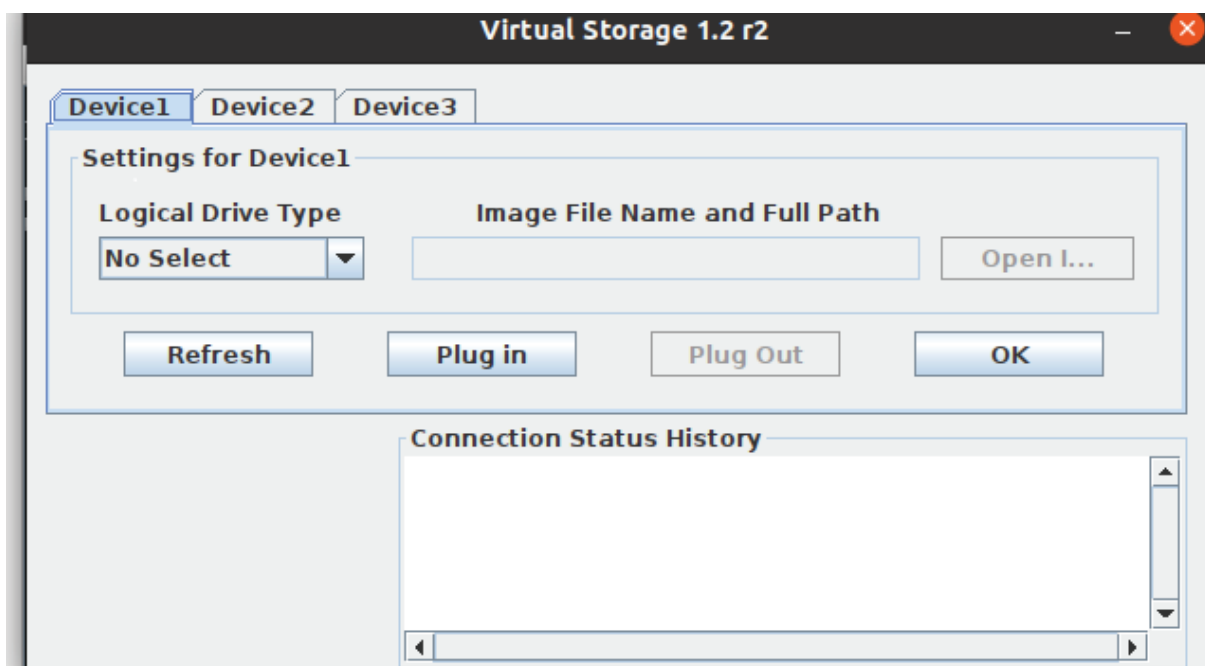
Assets Management

Machine Name Search by Machine Name Search Sort By Descending Action

	IPMI Address	Machine Name	Serial No.	Model No.	MAC Address	Vendor Name	Rack Name	Tags	Power State	Machine State
<input type="checkbox"/>	172.10.15.141	Compute-1	TY36DX54	AMD	00:00:5e:00:53:a0	Tyrone	rack1	14	ON	Commissioned
<input type="checkbox"/>	172.10.15.142	Unknown	TY36DX53	AMD	00:00:5e:00:53:ab	Tyrone	rack2	14	OFF	Deploying
<input type="checkbox"/>	172.10.15.143	Primary Server	TY36DX57	Intel	00:00:5e:00:53:as	Tyrone	rack3	14	ON	Deployed
<input type="checkbox"/>	172.10.15.146	Tyrone	TY36DX58	Intel	00:00:5e:00:53:ad	Tyrone	rack4	14	ON	Deployed
<input type="checkbox"/>	172.10.15.149	Unknown	TY36DX60	Intel	00:00:5e:00:53:af	Tyrone	rack5	14	ON	Deployed
<input type="checkbox"/>	172.10.15.158	Unknown	TY36DX54	AMD	00:00:5e:00:53:a0	Tyrone	rack1	14	ON	Deployed
<input type="checkbox"/>	172.10.15.159	Unknown	TY36DX53	AMD	00:00:5e:00:53:ab	Tyrone	rack2	14	OFF	Commissioned
<input type="checkbox"/>	172.10.15.169	Primary Server	TY36DX57	Intel	00:00:5e:00:53:as	Tyrone	rack3	14	ON	Releasing
<input type="checkbox"/>	172.10.15.178	Unknown	TY36DX58	Intel	00:00:5e:00:53:ad	Tyrone	rack4	14	ON	Commissioned
<input type="checkbox"/>	172.10.15.165	Tyrone	TY36DX60	Intel	00:00:5e:00:53:af	Tyrone	rack5	14	ON	Commissioned

Previous Showing 1-10 of 40 Next Page Size 10

- Image redirection



- Configurations can be saved as template and can be reused.

The screenshot shows the ProServe Settings page with the 'Role Base Access Control' section active. The left sidebar contains navigation links: Dashboard, Host Discovery, Assets Management, Analytics, Logs, and Settings. The main content area is divided into two panels: 'Create Role' and 'Role List'.

Create Role Panel:

- Name:** A text input field with the placeholder 'Name'.
- Select Permissions:** A list of permissions including Host Discovery, Commission Machine, Decommission, Deploy OS, Release OS, Create RAID, View System Log, and View Antivirus Log. A note below states 'Hold CTRL key to select multiple permissions'.
- Add Role:** A blue button at the bottom right.

Role List Panel:

- Search and Sort:** A search bar and a 'Sort By Descending' dropdown.
- Table:** A table with columns: Role, Assigned Users, Assigned Machine, Permissions Granted, and Actions.

Role	Assigned Users	Assigned Machine	Permissions Granted	Actions
Admin	30	All	All	View Edit
Member	30	50	10	View Edit
Reader	30	10	3	View Edit
- Navigation:** 'Previous' and 'Next' arrows, and 'Showing 1-10 of 40'.
- Page Size:** A dropdown set to '10'.

Assign Role Panel:

- Select User:** A dropdown menu with 'User1' selected.
- Select Role:** A dropdown menu with 'Admin' selected.
- Select Machine:** A list of machines (Machine1 to Machine5) with a note 'Hold CTRL key to select multiple Machine'.
- Select Tag:** A list of tags (Tag1 to Tag5) with a note 'Hold CTRL key to select multiple Tag'.
- Add Role:** A blue button at the bottom right.

User Assignment List Panel:

- Search and Sort:** A search bar and a 'Sort By Descending' dropdown.
- Table:** A table with columns: Username, Role, Assigned Machine, Assigned Tags, and Actions.

Username	Role	Assigned Machine	Assigned Tags	Actions
User1	Admin	All	All	View Edit
User2	Member	50	10	View Edit
User3	Reader	10	3	View Edit
- Navigation:** 'Previous' and 'Next' arrows, and 'Showing 1-10 of 40'.
- Page Size:** A dropdown set to '10'.

- IP address management with DHCP and DNS for Configuration and Management of Network

The screenshot shows the Tyrone Systems Network Settings page. The left sidebar contains navigation links: Dashboard, Sensor, System Inventory, FRU Information, Logs & Reports, Settings, Remote Control, Image Redirection, Power Control, Maintenance, and Sign out. The main content area is titled 'Network Settings' and contains five configuration cards: Network IP Settings, Network Bond Configuration, Network Link Configuration, DNS Configuration, and Sideband Interface (NIC-SI).

Network Settings Page Details:

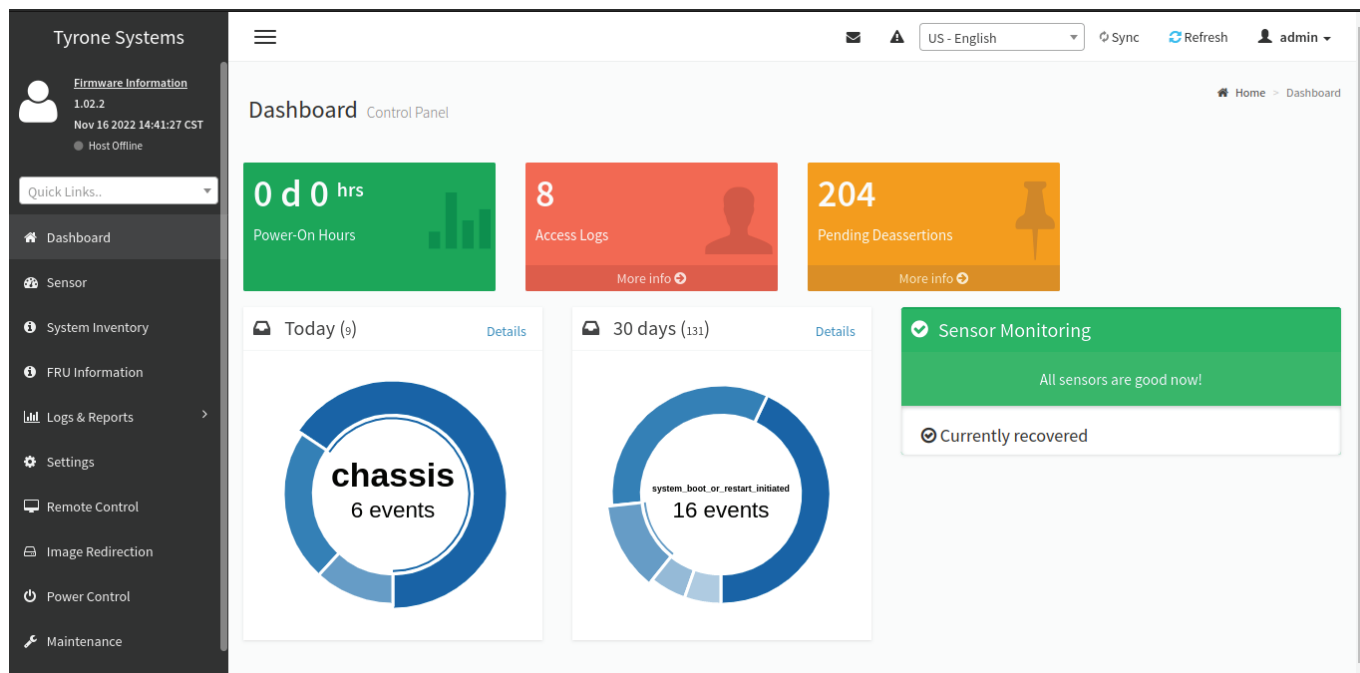
- Header:** 'Tyrone Systems' logo, 'Element Information' (3.04.2, Mar 24 2023 13:39:19 CST, Host Online), and a 'Quick Links...' dropdown.
- Navigation:** A top navigation bar with 'Home', 'Settings', and 'Network Settings'.
- Configuration Cards:**
 - Network IP Settings:** Represented by a network diagram icon.
 - Network Bond Configuration:** Represented by a network diagram icon.
 - Network Link Configuration:** Represented by a gear icon.
 - DNS Configuration:** Represented by a list icon.
 - Sideband Interface (NIC-SI):** Represented by a network diagram icon.

- Configurations can be saved as template and can be reused.

3. Real Time Monitoring and Analytics

Server health management with real-time subcomponent monitoring, error detection, proactive health management, and server firmware synchronization to ensure performance and stability of a system.

- Monitor server and sub-component health in real time and act on alerts
- Health status of critical components like Processors, Memory, Storage, Networking, and other parameters such as system cooling, temperature etc., blink LED to identify server
- Check the firmware version of Tyrone Servers and identify outliers
- Comprehensive Inventory Management



Tyrone Systems

Quick Links...

- Dashboard
- Sensor
- System Inventory
- FRU Information
- Logs & Reports
- Settings
- Remote Control
- Image Redirection
- Power Control
- Maintenance
- Sign out

System Processor Memory Controller BaseBoard Power Thermal PCIE Device PCIE Function Storage

Fan Info

Name	Member id	Physical Context	State	Reading(RPM)	UF	UC	UNC	LNC	LC	LF
FAN1	16	Fan	Enabled	8200.000000	NA	NA	NA	NA	800	500
FAN2	17	Fan	Enabled	7900.000000	NA	NA	NA	NA	800	500
FAN3	18	Fan	Enabled	8200.000000	NA	NA	NA	NA	800	500
FAN4	19	Fan	Enabled	7800.000000	NA	NA	NA	NA	800	500
FAN5	20	Fan	Enabled	8200.000000	NA	NA	NA	NA	800	500
FAN6	21	Fan	Enabled	7900.000000	NA	NA	NA	NA	800	500
FAN7	22	Fan	Enabled	8300.000000	NA	NA	NA	NA	800	500
FAN8	23	Fan	Enabled	8200.000000	NA	NA	NA	NA	800	500

Temperature Info

Name	Member id	Physical Context	State	Reading(Celsius)	UF	UC	UNC	LNC	LC	LF
CPU0_Temp	32	Intake	Enabled	50.000000	96	93	NA	NA	NA	NA
CPU1_Temp	33	Intake	Enabled	41.000000	96	93	NA	NA	NA	NA
CPU0_VR	36	Intake	Enabled	40.000000	110	105	NA	NA	NA	NA
CPU1_VR	37	Intake	Enabled	27.000000	110	105	NA	NA	NA	NA
Inlet	38	Intake	Enabled	25.000000	75	70	NA	NA	NA	NA
PCH	41	Intake	Enabled	51.000000	104	99	NA	NA	NA	NA
Ambient	42	Intake	Enabled	46.000000	85	80	NA	NA	NA	NA
BMC	43	Intake	Enabled	46.000000	90	85	NA	NA	NA	NA
X550	44	Intake	Enabled	47.000000	123	118	NA	NA	NA	NA
CPU0_DIMMAD	48	Intake	Absent	NA	90	85	NA	NA	NA	NA

FRU Field Replaceable Units

Available FRU Devices

FRU Device ID: [Search]

FRU Device Name: FRU

Chassis Information

Chassis Information Area Format Version	1
Chassis Type	Main Server Chassis
Chassis Part Number	132CH-R1600
Chassis Serial Number	519-22100200100039

Board Information

Board Information Area Format Version	1
Language	English
Manufacture Date Time	Sat May 6 11:32:00 2023
Board Manufacturer	TyroneSystems
Board Product Name	AW120X-L6i
Board Serial Number	ASB030120426
Board Part Number	AW120X-L6i

Product Information

Product Information Area Format Version	1
Language	English
Product Manufacturer	TyroneSystems
Product Name	Camariro
Product Part Number	TD100C3R-212
Product Version	01
Product Serial Number	2X2208623050
Asset Tag	SOE3003562102

- Enhanced Capacity Planning
- Automatic Under-utilized Server Identification by analysing historical utilization and power data
- Data Center Layout Management by power budget enforcement, power capping etc.
- Predictive detection of unhealthy devices in Servers (Processor, MBD, Memory, Fan, Power Supply, Storage, Voltage / Sensor Reading, Network Controllers) (of multiple components) with alerts, anomaly detection, Server failure Indication and alerts
- Telemetry data for analytics

ProServe
Formerly known as TSM

Analytics

Server Analytics Predictive Analytics

Server Analytics (Data Center View)

CPU Temperature (in a day)

Total Power Consumption

System Temperature (in a day)

Fault Records

System	24
Voltage	62
Fan	3
Temperature	5
Power Supply	8

Event Severity Chart (in last 60 mins)

Critical	6
Predictive Warning	11
Normal	10

Event Frequency (in last 7 days)

4. Notifications, Alerts, Reporting & Servicing

Monitoring of data center health, power, and thermals in real time and providing alerts and notifications

- Alerts based on custom power & thermal events
- Centralized reporting tools that provide comprehensive details inventory reporting etc.
- Event logs (with monitoring and extraction) based on real time events / health reporting,
- Offers Self Service portal for firmware and patch deployments.
- Provision for integration of status monitoring of tickets generated and warranty details.

The screenshot shows the ProServe web interface. The top navigation bar includes 'Settings' and a user profile 'tsm-admin' with a 'Logout' button. The left sidebar lists various system components like Dashboard, Host Discovery, Assets Management, Analytics, Logs, and Settings. The main content area is titled 'Manage Alert' and contains a 'Setup Alert Notification' table. This table lists events such as 'Health check failed', 'Auto system reset', 'Bandwidth threshold', and 'Deployment failed', each with a severity level and checkboxes for notification methods (Email, SNMP, IPMI). An 'Apply' button is located at the bottom right of the table.

Type	Event	Severity	<input type="checkbox"/> Email	<input type="checkbox"/> SNMP	<input type="checkbox"/> IPMI
System	Health check failed	Warning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System	Auto system reset	Warning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
User	Bandwidth threshold	Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System	Deployment failed	Warning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The screenshot displays the 'Event Log' section of the Tyrone Systems web application. The interface includes a sidebar with navigation options like Dashboard, Sensor, System Inventory, FRU Information, Logs & Reports, Settings, Remote Control, Image Redirection, Power Control, Maintenance, and Sign out. The main area shows 'All sensor event logs' with filters for 'Filter by Date' (Start Date, End Date) and 'Filter by type' (All Events, All Sensors). Below the filters is a graph titled 'Event Logs Statistics' showing data for May 2023. To the right, a list of event entries is displayed, including 'ChassisIntrusion sensor of type physical_security logged a general chassis intrusion' and 'sensor of type system_event logged a pef action'.

System Logs

Log Records

Time of Event	IPMI Address	Machine Name	Log Messages
12/05/2023	172.27.152.89	Tyrone	(root) CMD (run-parts /etc/cron.hourly)
12/05/2023	172.27.152.89	Skyus	Out of memory: Kill process 1234 (firefox) score 5678 or sacrifice child
12/05/2023	174.27.142.23	Unknown	Starting Network Manager...
12/05/2023	171.27.122.90	Skyus	Failed password for user john from 192.168.0.100 port 1234 ssh2
12/05/2023	172.27.152.82	Tyrone	Your request has been processed successfully.
12/05/2023	172.27.152.30	Tyrone	systemd[1]: Starting Network Manager...
12/05/2023	172.27.153.85	Unknown	Your request has been processed successfully.
12/05/2023	172.27.152.89	Skyus	Failed password for user john from 192.168.0.100 port 1234 ssh2

Maintenance

- Backup Configuration
- Firmware Image Location
- Firmware Information
- Firmware Update
- Preserve Configuration
- Restore Configuration
- Restore Factory Defaults
- System Administrator
- POST Code
- BMC Reset

5. Miscellaneous

ProServe provides various miscellaneous features and can be customized as per user requirements by providing below enumerated features :

- Secure SED Management, Auto Lock with Local Key Management, Instant Secure Erase with coherent controller management utility, RAID Management & Virtual Disks Creation
- Intuitive web console that provides features with provision for inventory & health alerts
- RESTful APIs for Integrate with other solutions, Provides SDK based on programming language like Python or similar. Custom scripts configurations.
- Highly Customizable dashboard (user de-fined with flexible name and widgets), Multiplatform Support, Industry Standard Protocols and underlying tools
- Role based Access Control (RBAC)

- Alert if select component(s) populated are not in OEM Hardware System Compatibility list

The screenshot shows the ProServe Assets Management interface. A modal dialog box titled "Release OS" is open, asking "Secure Erase the disk" with "NO" and "YES" buttons. The "YES" button is highlighted. Below the dialog, a table lists assets with columns: IPMI Address, Machine Name, Serial, Vendor Name, Rack Name, Tags, Power State, and Action. The table shows 10 assets, with the first one selected. The "Action" column for the selected asset shows a dropdown menu with options: Lock Machine, KVM Over HTML, Commission, Decommission, Rollback OS, Release OS, Power ON, Power OFF, and Assignment. The "Release OS" option is highlighted.

IPMI Address	Machine Name	Serial	Vendor Name	Rack Name	Tags	Power State	Action
172.10.15.141	Compute-1	TY36DX54	Tyrone	rack1	14	ON	Lock Machine
172.10.15.142	Unknown	TY36DX53	Tyrone	rack2	14	OFF	KVM Over HTML
172.10.15.143	Primary Server	TY36DX57	Tyrone	rack3	14	ON	Commission
172.10.15.146	Tyrone	TY36DX58	Tyrone	rack4	14	ON	Decommission
172.10.15.149	Unknown	TY36DX50	Tyrone	rack5	14	ON	Rollback OS
172.10.15.158	Unknown	TY36DX54	Tyrone	rack1	14	ON	Release OS
172.10.15.159	Unknown	TY36DX53	Tyrone	rack2	14	OFF	Power ON
172.10.15.169	Primary Server	TY36DX57	Tyrone	rack3	14	ON	Power OFF
172.10.15.178	Unknown	TY36DX58	Tyrone	rack4	14	ON	Assignment
172.10.15.165	Tyrone	TY36DX50	Tyrone	rack5	14	ON	Commission

The screenshot shows the Tyrone Systems System Inventory interface. The "Storage" tab is selected, displaying a table of storage drive information. The table has columns: Name, Serial Number, Manufacturer, Protocol, Model, Revision, Encryption Status, Media Type, and State. The table lists 10 storage drives, with the first one selected. The "Name" column for the selected drive shows a dropdown menu with options: NVMe_DeviceC_N5D1, NVMe_DeviceD_N5D1, SATA_DeviceB_Port0, SCSI_Target0_LUN0, SCSI_Target0_LUN200, SCSI_Target0_LUN300, SCSI_Target0_LUN400, SCSI_Target0_LUN500, SCSI_Target0_LUN600, and SCSI_Target0_LUN700. The "Release OS" option is highlighted.

Name	Serial Number	Manufacturer	Protocol	Model	Revision	Encryption Status	Media Type	State
NVMe_DeviceC_N5D1	56CKN07B07238	N/A	NVMe	SAMSUNG MZQL27TEHBLA-00A07	NVMe Spec v1.4	Unlocked	SSD	Enabled
NVMe_DeviceD_N5D1	56CKN07B07590	N/A	NVMe	SAMSUNG MZQL27TEHBLA-00A07	NVMe Spec v1.4	Unlocked	SSD	Enabled
SATA_DeviceB_Port0	56PENL0TC14003F	N/A	SATA	Samsung SSD 870 EVO 500GB	V50TB2Q6	Unlocked	SSD	Enabled
SCSI_Target0_LUN0	N/A	SEAGATE	NA	4006	I200	Unlocked	NA	Enabled
SCSI_Target0_LUN200	N/A	SEAGATE	NA	4006	I200	Unlocked	NA	Enabled
SCSI_Target0_LUN300	N/A	SEAGATE	NA	4006	I200	Unlocked	NA	Enabled
SCSI_Target0_LUN400	N/A	SEAGATE	NA	4006	I200	Unlocked	NA	Enabled
SCSI_Target0_LUN500	N/A	SEAGATE	NA	4006	I200	Unlocked	NA	Enabled
SCSI_Target0_LUN600	N/A	SEAGATE	NA	4006	I200	Unlocked	NA	Enabled
SCSI_Target0_LUN700	N/A	SEAGATE	NA	4006	I200	Unlocked	NA	Enabled

- Dynamic enable/disable of ports (USB etc.) remotely

USB Configuration

Select a BIOS Variable: **USB Front Ports Enable**

BIOS Variable Value: **0x1 (Enabled)**

Setup Page: **Advanced/USB Configuration/USB Front Ports Enable**

Key Value	BIOS Variable Description	Value	SavedValue	ID
USB Front Ports Enable	Enable or disable the USB Front Ports	0x1 (Enabled)	0x1 (Enabled)	0
USB Rear Ports Enable	Enable or disable the USB Rear Ports	0x1 (Enabled)	0x1 (Enabled)	1
USB Internal Ports Enable	Enable or disable the USB Internal and BMC Ports	0x1 (Enabled)	0x1 (Enabled)	2

6. Secure Authentication

Tyrone ProServe provides secure management using various authentication measures for secure Server Management. Such examples of measures include:

- HTTPS
- LDAP
- NTP
- Active Directory
- SMTP
- SNMP
- Radius
- SSH

7. Technical information

Tyrone ProServe uses industry standard protocols, Interface mechanism and user interface which enable user to perform System Management with ease and provides facility to customize, integrate in multi platforms. Such details are covered vide a comprehensive list comprising of:

a. Hardware Protocols:

- IPMI (2.0)
- Redfish
- HTTPS
- SSH/CLI
- SNMP

b. Management Interface:

- BMC, IPMI 2.0, IPMI over LAN,
- Serial over LAN
- Out of Band Management
- Agent based Management
- iKVM
- Virtual Media
- Redfish & SMASH Support

c. User Interface:

- REST APIs,
- HTML5 GUI
- JAVA
- CLI / PowerShell

TSM Product datasheet doesn't cover all features, there may be extensive features happened to be part of the TSM but have not reflected here. For such details kindly contact local Tyrone representative.