Secure everyThing

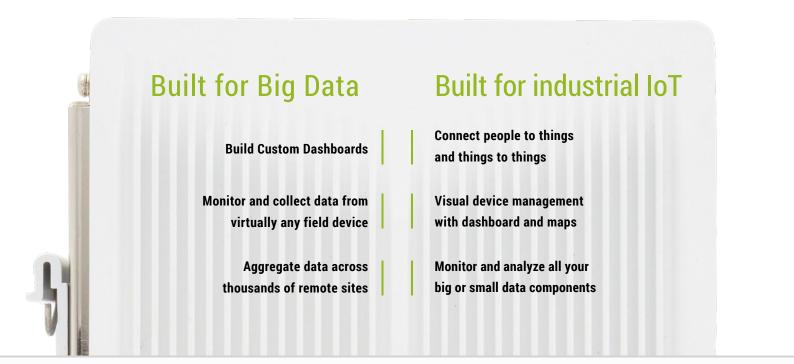
# **ENDIAN CONNECT PLATFORM**

# **BIG DATA FOR INDUSTRIAL IOT**

The simplest and most secure platform for connecting your users and devices

endian		Admin 🛓	Logout 🔒
DASHBOARD USERS	DEVICES /	PPLICATIONS ORGANIZATIONS STATISTICS SETTINGS	
Connections Map	Analytics		
e - ACME Engine -	3 0	< Zoom Out 🔰 🚫 Oct. 19, 2017 14:29:50 to Oct. 19, 2017 1	12:15 O
Overview Engine Speed (1/min)	Performance (KWel)	Performance / Engine Speed	
		13 MW 2.0 K	
an 1000 1200		250 kW	
- 20 / 100-			ors
1500	1.00 MW	14:30 15:30 16:30 16:00 16:30 17:30 17:30 18:00	
1500	Loom	- Performance (KWel) 303 kW 1.000 MW 1.000 MW	
		- Engine Speed (regime y) 1.500 K 1.500 K	
~ Cylinder			
E Bank A		Bank B Your Engine	
430		430 Denk B Tout Light C	
425		425	
420		400	-
415		415	V
410		410	
405		405	
400 14:30 15:00 15:30 16:00 16:3	0 17:00 17:30 18:00		
14:30 15:00 15:30 16:00 16:3	0 17:00 17:30 18:00	14:30 15:00 15:30 16:00 16:30 17:00 17:00 16:00	
- Cylinder A1	406 425 425	- Cylinder B1 407 425 425	
Cylinder A2 Cylinder A3	404 425 425 405 425 425		
- Cylinder A4	406 425 425	- Cylinder B4 403 425 425	
Cylinder A5 Cylinder A6	406 425 425 407 425 425	Cylinder 85 408 425 425 Cylinder 86 406 425 425	
Cylinder A7	407 425 425	Upmorr to 400 445 445	
Cylinder A8	407 425 425	- Cylinder 88 408 425 425	
Engine Data / Diagram			
Cooling Circuit / Engine Cool	ng / Heating Circuit	Voltage / Current / Power (MFR)	
Metric -	Min Max Current	Metric - Min Max Current	
Engine Entry Coolant Temp.	42.50 42.50 42.50	Actual Power 0 0 0	
Engine Exit Coolant Temp.	90.00 90.00 90.00	Frequency Generator 0 0 0	

### The Key Features of Endian Connect Begin Where Existing Solutions Fall Short







# **Endian Connect Platform - Three Key Principles**







### **Secure Connection**

At the heart of Endian is security and our passion for this is evident in the Connect Platform. Things like industry standard encryption protocols, two-factor authentication, support for external authentication sources (like Active Directory or LDAP) and so much more. In addition, the Endian OS platform is included in all of the Endian components as well so you know you get the highest levels of security.

### **Easy Management**

Our goal is make secure remote access as easy as possible. Endian Plug & Connect feature which enables rapid, centralized remote deployment of field devices over the Internet. A real-time map visualization of your infrastructure makes remote access as simple as point-and-click. Integrated application support allows you to access remote resources using only a browser and works great on mobile platform too!

# **Advanced Analytics**

The Connect Platform is at the heart of connecting your users and things together which makes it even better suited to store, monitor and analyze all your big or small data components across your remote infrastructure. Build custom dashboard views to get the insight your business needs to provide superior products and support. The data collected forms the basis for predictive maintenance.

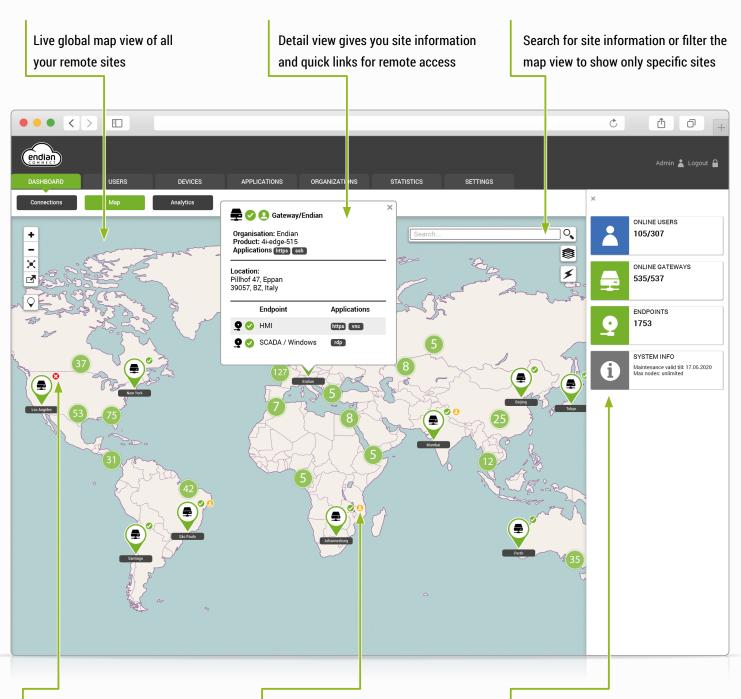


# **Predictive Maintenance**

Endian Connect Platform provides the ability to collect data from globally distributed sites. These data form the basis for predictive maintenance and the optimization of machines. Users benefit from reduced downtime and higher efficiency. The result is satisfied customers and decisive competitive advantages.

# Live Map

Visualize your network like never before using the Dashboard with live maps feature which shows all your remote sites and user activity in real-time.



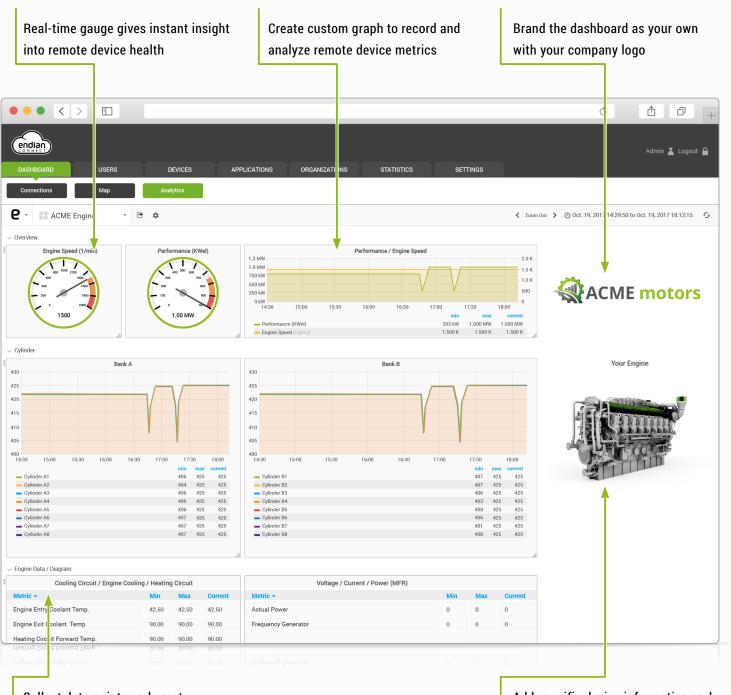
See remote site status updated in real-time

See who is connecting to remote sites with real-time user information

Dashboard view gives you at-a-glance usage information

# **Analyze and Monitor Dashboard**

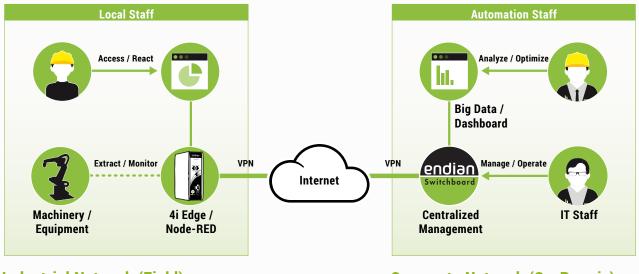
Build custom real-time dashboards to monitor and analyze data coming from remote field equipment. Add your company branding as well to further enhance your business profile.



Collect data points and create informative table views for users

Add specific device information and image to dashboard

# The Connect Platform Components



#### Industrial Network (Field)

- Machine Data Extraction and Automation
- Local Monitoring and Dashboard (Fog)
- Secure Connectivity and Data Forwarding

#### **Corporate Network (On-Premis)**

- Centralized Management and Monitoring
- Predictive Maintenance and Analysis
- Collective Dashboard and Intelligence

# **Build Your Own Connect Platform**

(1) You Choose Your Big Data Switchboard Server

#### **On-Premise**

- Host in your own infrastructure
- Centralized security available
- Available as hardware, software or virtual appliance

#### 2 Next Choose How to Connect

#### Endian Connect APP

- VPN Client Software
- Full Network Access
- Support for Windows and Mac OS X Platforms

#### (3) Connect Your Networks & Devices

#### Hardware

- Hardware with Endian OS
- Plug & Connect available
- Protect networks / devices
- Indoor & Rugged Models

#### Software Agent

- Lightweight software client
- Plug & Connect available
- Protect devices
- Windows & Mac OS X

#### **Cloud-Hosted**

- No servers installation/setup
- Start deploying immediately
- Convenient low-cost monthly billing option available

#### **Endian Connect WEB**

- Any web browser is a client
- Works on mobile platforms\*
- Utilize supported apps
- \* Requires HTML5 Browser



RDP

Connect WEB Apps

#### **Custom / SDK**

- Embed client in your product
- Plug & Connect available
- Protect devices
- Modern platform & API

# Endian 4i Edge 515

The most robust industrial solution

4i Edge 515 is the strongest ruggedized appliance of the new series. Its powerful hardware is conceived to work in critical conditions and under extreme temperatures. The solution guarantees an even more stable and scalable VPN connection between head quarter and branch offices or production sites.

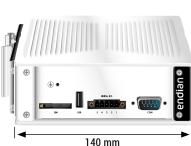
#### **Highlights**

- -20 to +70°C operating temperature
- Simple, secure VPN access
- 3G Module (optional)
- Dual power input 24V DC
- 4G Ready

#### **Recommended for**

- Machine building
  - Manufacturing
- Infrastructure
- Healthcare
- Communications





#### Performance

Firewall Throughput:	120 Mbps			
VPN Throughput:	30 Mbps			
IPS Throughput	20 Mbps			

# Endian 4i Edge 313

The DIN rail industrial solution

It is the ideal appliance to secure industrial networks and protect data exchange between branch offices. Serial over IP and Digital Input/ Output included.



#### Highlights

- 0 to +60°C operating temperature
- Simple, secure VPN access
- 3G Module (optional)
- Power input 24V DC
- 4G Ready

#### **Recommended for**

- Machine building
- Manufacturing
- Infrastructure

# Endian 4i Edge 112

Powerful desktop industrial solution

A scalable desktop solution that provides comprehensive network protection. The ideal product to connect remote locations that are not temperature sensitive. Maximum flexibility and easy integration in all networks.

#### **Highlights**

- 0 to +60°C operating temperature
- · Simple, secure VPN access
- Power input 24V DC

#### **Recommended for**

- Infrastructure
- Healthcare
- Communications



### References

successfully used by	challenge	why endian
	Provide secure remote access to construction and production machinery.	Granular user- and group- level permis- sion management in Endian Connect Switchboard.
CATERPILLAR®	Run remote diagnostics and deliver software updates to gas engines for distributed power generation.	Endian 4i box installed directly into the endpoint to enable remote servicing and maintenance. Endian Connect Switch- board for granular management of access privileges.
<b>Werfen</b> Diagnostic Solutions for Life	Connect diagnostic equipment located in hospitals and labora- tories to unsecure LAN segments for remote monitoring and predic- tive maintenance.	Attach 4i Edge to every machine to get plug-and-protect security deployed with zero training for field service personnel. Remote management and central moni- toring via Endian Connect Switchboard.

#### about us endian

Endian is an emerging market leader in the area of Industrial IoT security. We have a proven track record in delivering innovative security solutions and a strategic commitment to the needs of industrial customers. We provide integrated software and hardware solutions that maximize effective security. Endian Connect for Industrial IoT helps customers protect their business with best-in-class security and minimal operating cost. Secure everyThing.



Want to learn more? Get in touch. www.endian.com