WIND

AN INTEL COMPANY

From Satellite to Ground Station

When Your Software Defined Future Simply Must Work

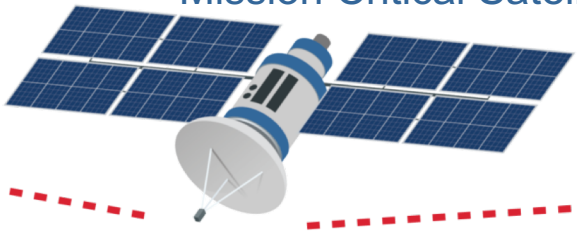
Ross Dickson, Wind River Systems

WHEN IT MATTERS,
IT RUNS ON WIND RIVER.

Solving Critical Business Problems in Sat Com

Ultra-Reliable Ground Stations

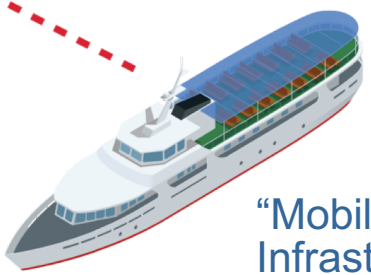
Mission Critical Satellites



Connected Aviation

On Premise Infrastructure

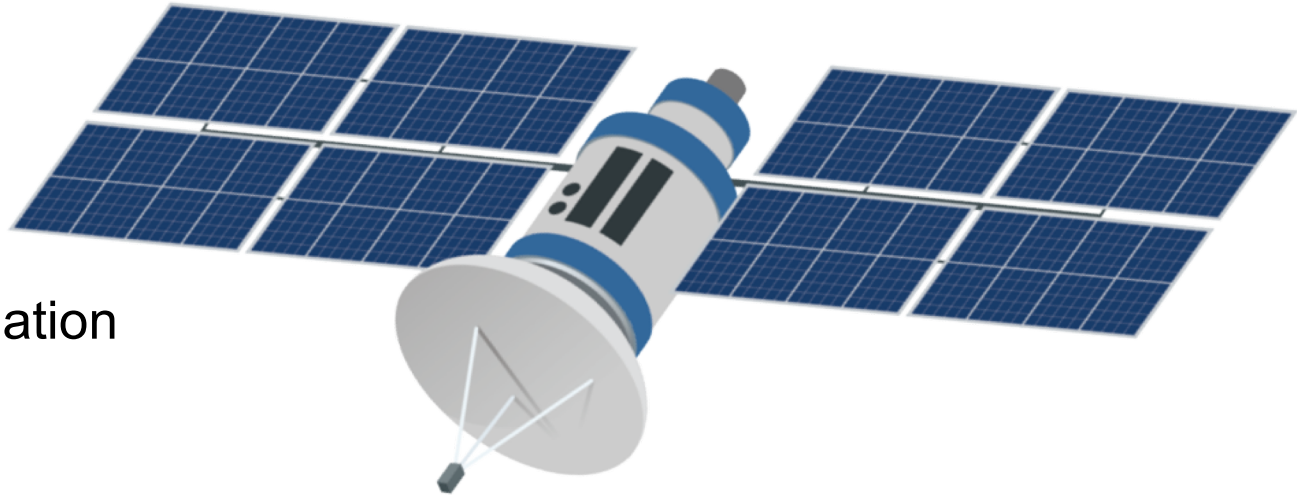
Energy and Mining



“Mobile” Infrastructure

Key Business Challenges for Mission Critical Satellites

- Balancing cost of survivability vs cost of replacement
- Development cost
- Certification & Regulation



Key Business Challenges for Ground Stations

- Maintaining ultra-reliable communications services
- Ensuring unbreakable end-to-end security
- Minimizing lifetime operational costs
- Avoiding vendor lock-in for hardware and software

Key Business Challenges for “Mobile” Infrastructure

- Delivering a rich web experience with minimal bandwidth backhaul
- Real-time delivery of personalized content
- Security of the Infrastructure
- Consumer security

Key Business Challenges for Energy and Mining

- Support high complexity workloads in remote environments
- High application availability in the presence of connectivity outages
- Development cost
- Addressing security threats in remote locations

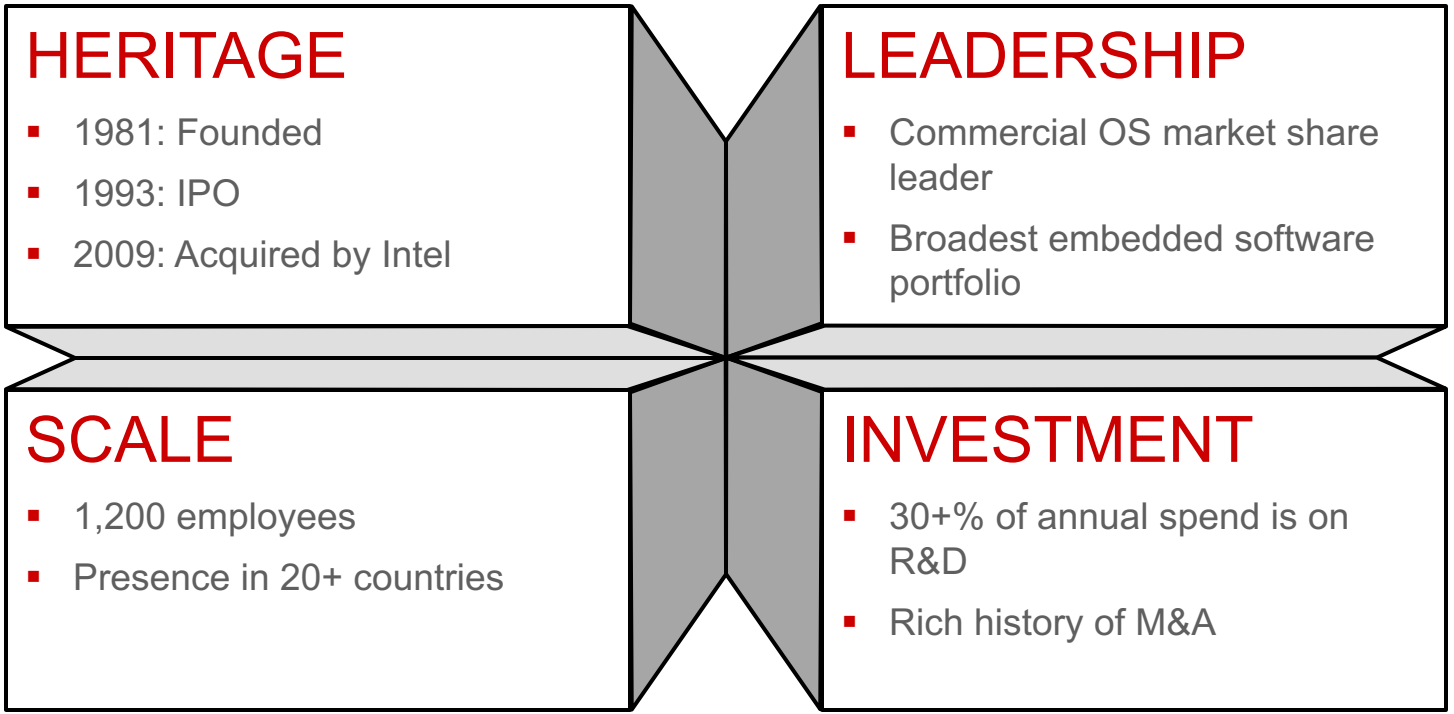
Key Business Challenges for Connected Aviation

- Size Weight and Power
- Multiple Vendors
- Certification of Avionics
- Safety and Security of Avionics
- Size Weight and Power

Key Business Challenges for On Premise Infrastructure

- Cost Control
- Confidentiality & Security
- Flexibility and Service Agility
- Avoiding vendor lock-in for applications

For over 35 years, Wind River has helped the world's technology leaders power generations of the safest, most secure devices



CHEMICAL SECTOR

COMMERCIAL BUILDING SECTOR

COMMUNCIATIONS SECTOR

CRITICAL MANUFACTURING

DAMS SECTOR

DEFENSE BASE SECTOR

EMERGENCY SERVICES SECTOR

ENERGY SECTOR

FINANCIAL SERVICES SECTOR

FOOD & AGRICULTURE SECTOR

GOVERNMENT BUILDING SECTOR

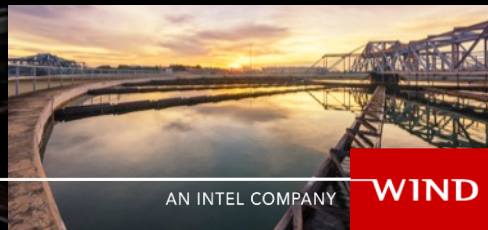
HEALTH CARE SECTOR

IT SECTOR

NUCLEAR SECTOR

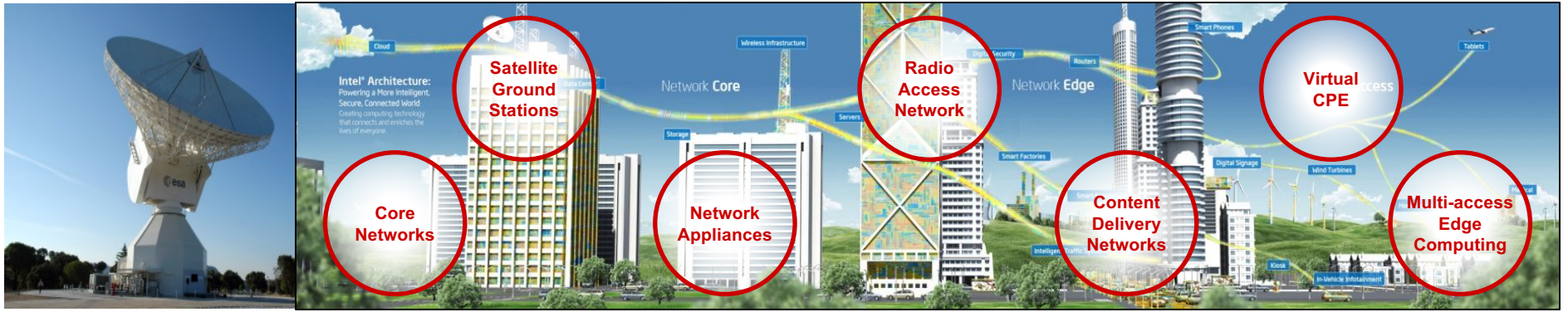
TRANSPORTATION SECTOR

WATER & WASTEWATER SECTOR



Industry-Leading Expertise in Communications

We deliver secure software platforms that run the world's most reliable networks



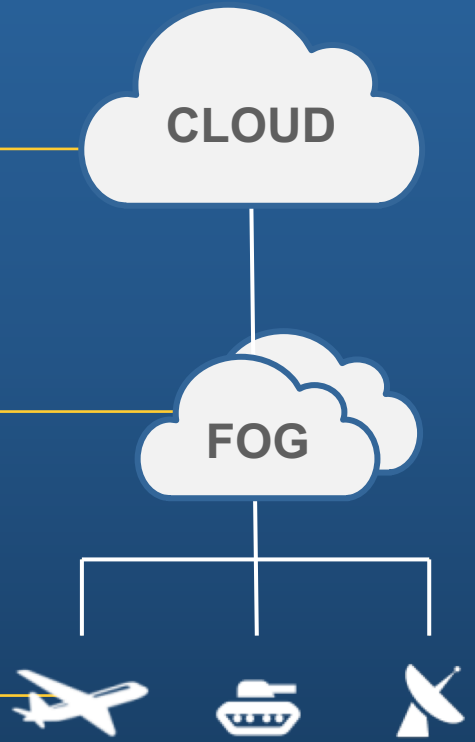
- **Designed** by industry experts
- **Adopted** by all the top 20 Telecom Equipment Manufacturers worldwide

Wind River Product Portfolio

Helix Device Cloud, Titanium Core, Simics

Titanium Control

VxWorks, Wind River Linux, Titanium Edge



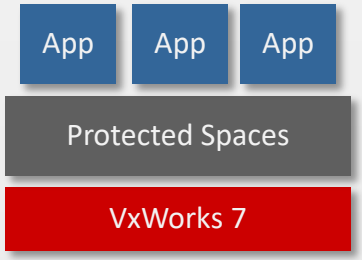
WHEN IT MATTERS, IT RUNS ON WIND RIVER.

Wind River VxWorks

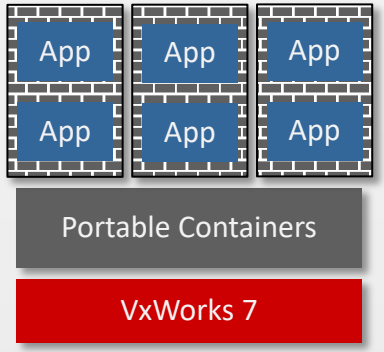
COTS Solutions from Real Time to Virtualization

Single Function Device

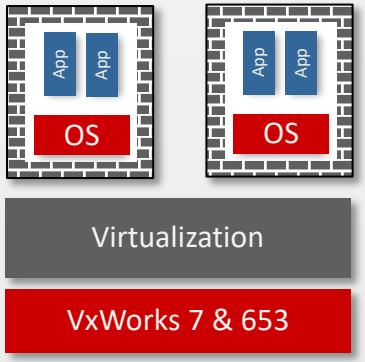
Multi-function Device



Multi-tenant Device



Multi-platform Device



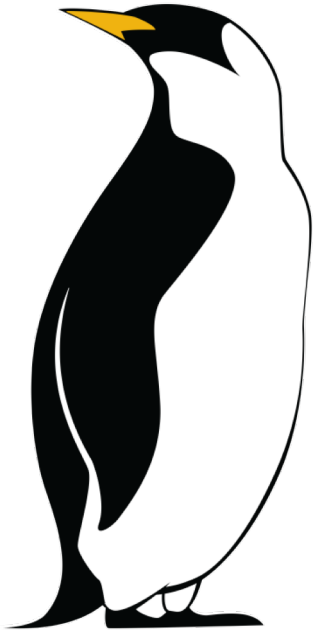
Certification May Be In Your Future

Supported Certification Standards

Market	Standards	Area
Industrial	IEC 61508	Functional Safety
Automotive	ISO 26262	Functional Safety
Nuclear	IEC 60880	Safety
Rail	EN 50128	Safety
Medical	IEC 62304	Safety, Software Lifecycle
Aviation	DO-178C	Safety
All Markets	IEC 27034	Security, Secure Dev. Lifecycle
All Markets	IEC 15408	Security, Common Criteria
Industrial	IEC 62443	Security for Industrial Devices

Wind River Linux Overview

Commercially Validated Robust Embedded Linux



WIND SUPPORT NETWORK

- Long Term Support

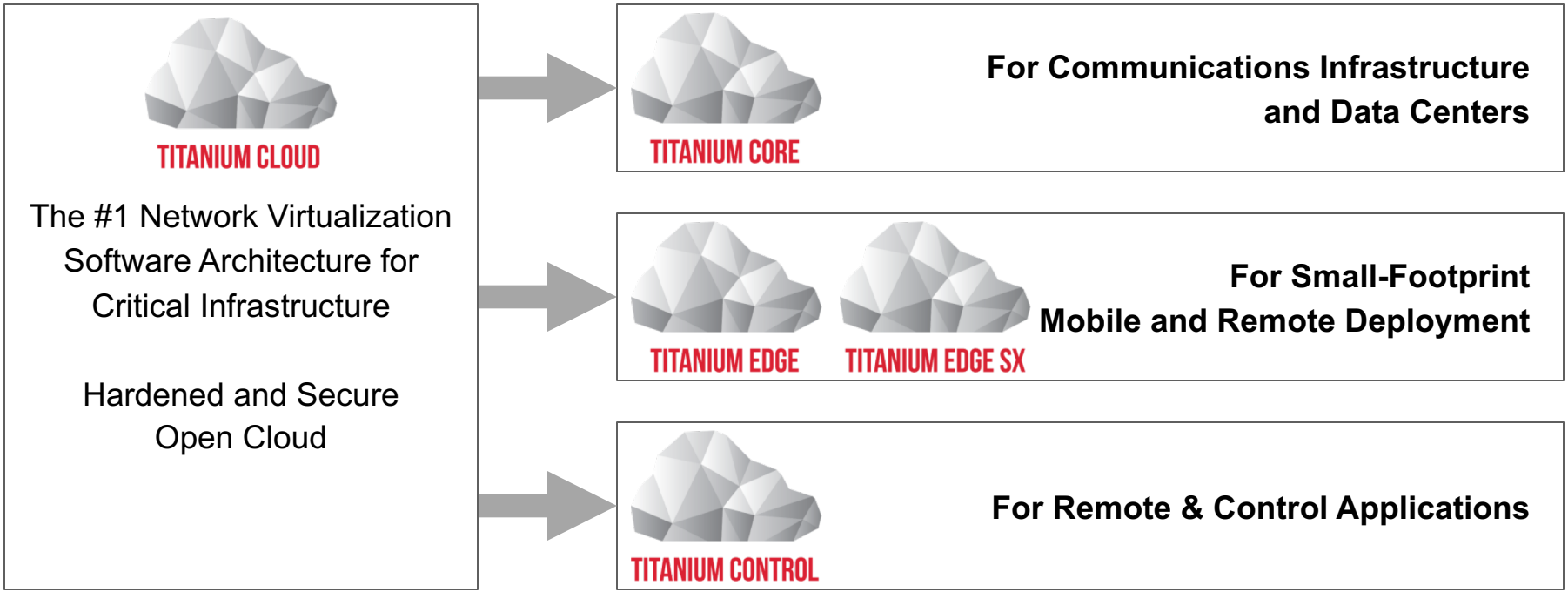
- Compliance Artifacts
- Security Shield

yocto PROJECT

- Industry Standard Linux Baseline

Wind River Cloud Solutions

One Architecture, Multiple Products



Wind River Simics System Simulation

Simics is a **full system simulator** used by software developers to simulate the hardware of **complex electronic systems**.

- Simulate processors, peripherals, and networks.
- Simulate any size target system.

- Run unmodified target binaries.
- Use unique and powerful debugging techniques.
- Record, save, and restore your simulation runs.

When it Simply Must Work, It Runs Wind River

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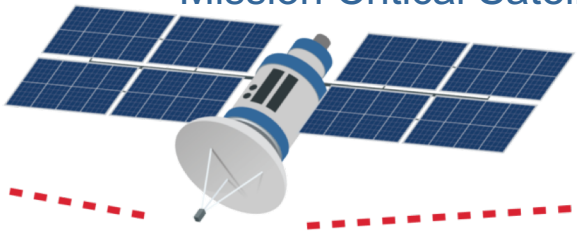
Mission Critical Satellites



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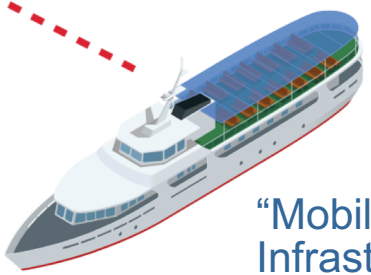

“Mobile” Infrastructure


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