

NODE STREAM™



Solving Remote



End-to-end remote monitoring and operations solutions

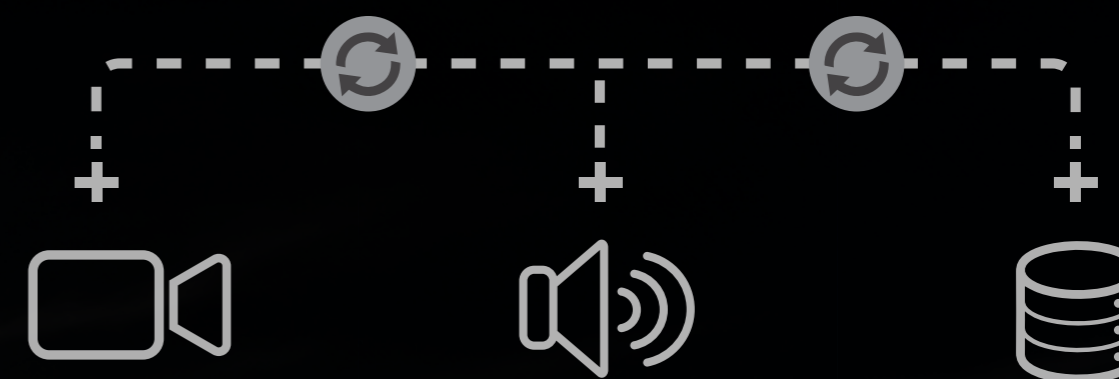
Nodestream™ is engineered to overcome challenges associated with remote video streaming, such as high latency and bandwidth constraints, by optimising network bandwidth and ensuring high-fidelity communication even in ultra-low connectivity environments.

This capability is particularly valuable for industries that require real-time data and video transmission from remote locations, ensuring operational efficiency and decision-making based on live data streams.

Engineered to cater to a broad spectrum of operational requirements and use cases, Nodestream™ is the solution of choice for those that demand dependable, secure, and uninterrupted streaming of video, audio, and data in various operational environments.

Key Features:

- Stream up-to 16 channels per encoding device of quality video at <2Mbps
- Cloud-based web platform for simple deployment
- Compatible with any camera source
- Netflix style user interface
- Instantly share video securely with third parties
- Adjustable settings for bandwidth, framerate, and latency
- Optimised for low bandwidth environments
- Live record functionality
- Military grade point-to-point security using 384-bit encryption with rolling keys
- Choice of self-hosted or Harvest hosted cloud platform



Video

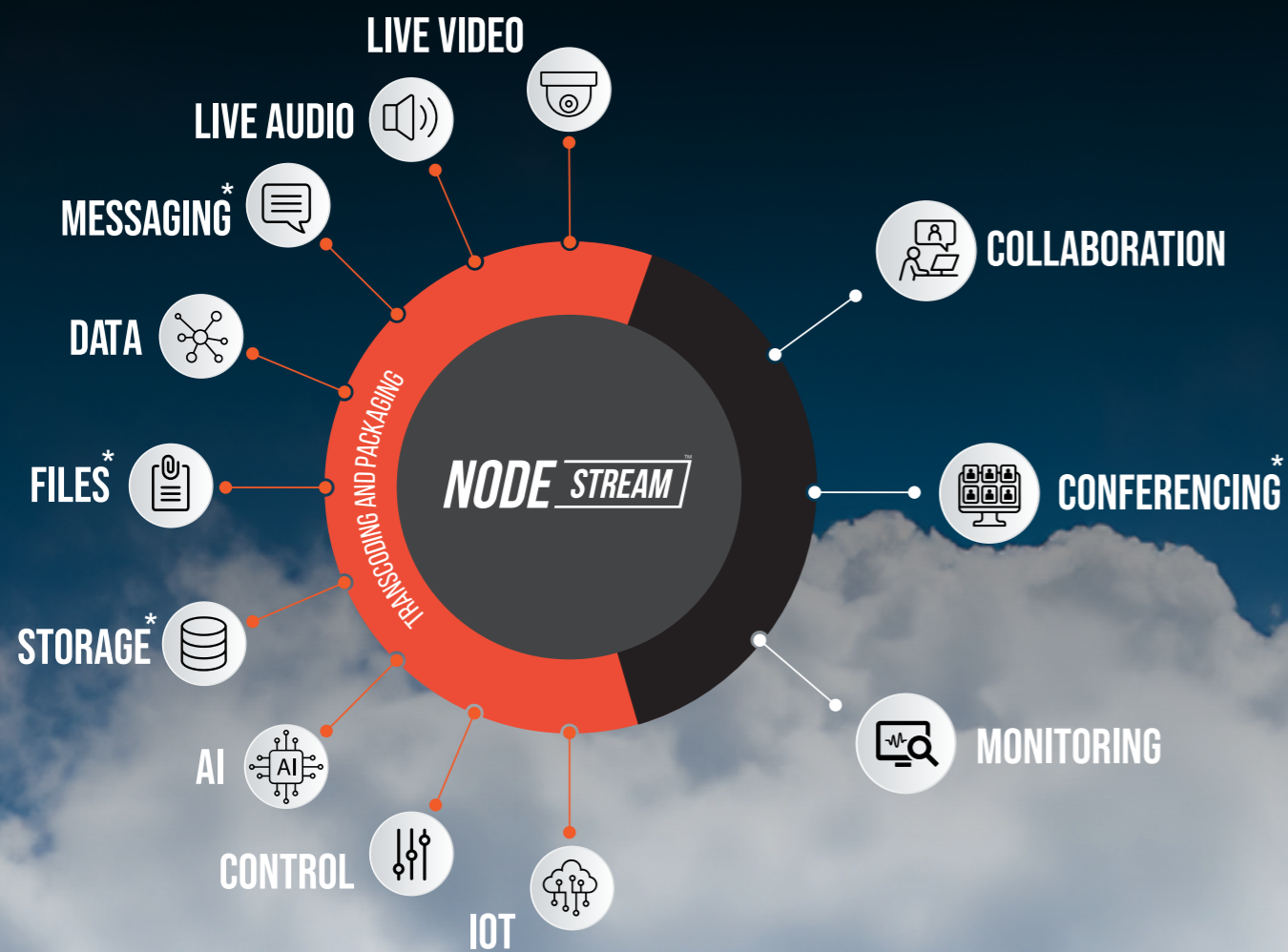
Nodestream™ combines a Netflix-style interface with the latest H.265 compression, ensuring high-quality video at bitrates as low as 8Kbps. It supports various video formats, offers end-to-end encryption, and is optimised for low bandwidth environments make it particularly ideal for satellite-based systems.

Audio

The system delivers a secure 2-way nodal IP intercom solution capable of working across any network. The system is ideal for maintaining cohesive communication between remote work-groups or stakeholders. It is purpose designed to operate and deliver quality audio over the poorest networks with incredible efficiency

Data

Alongside video and audio streaming, you can input/output upto 10 data streams from your systems and sensors via, Serial, TCP or UDP interfaces with most industry standard formats supported. Enable deep understanding and analytics of remote systems and interfaces for better informed decision-making or process automation.



*FEATURE DUE LATE 2024



Nodestream™ Benefits

Bring your team back to base

Remove personnel from remote sites and place them in command centres, offices, homes, or anywhere. Multiple projects can be supported simultaneously by one team.

Real-time quality decision-making

Get access to decision-making data immediately to eliminate delays to your client deliverables.

Improve safety exposure

Use the tech to keep more of your people safe from harm by having less people in the field

Reduce your carbon footprint

Less people means using smaller assets and less transport = burning less fuel and oils.

Lower your costs

Improve asset management and customer delivery by reducing operational costs of travel, transportation, expert support, and logistics.

Reduce unplanned downtime

Give your personnel immediate access to technical experts for repair and maintenance without inheriting the added costs and delays in getting the expert to site.

Global presence, local support

With a global presence and distribution network we can provide local and timely support to customers, and efficiently introduce new technology and functionality to our markets.

Industry proven - operational awareness & control across, sea, land, and air



>300,000
OPERATIONAL
HOURS
SINCE 2020

>5 MILLION
HOURS
REDUCTION
IN HSE EXPOSURE

>\$400
MILLION
IN OPERATIONAL
SAVINGS

≤90%
REDUCTION
IN CARBON
FOOTPRINT

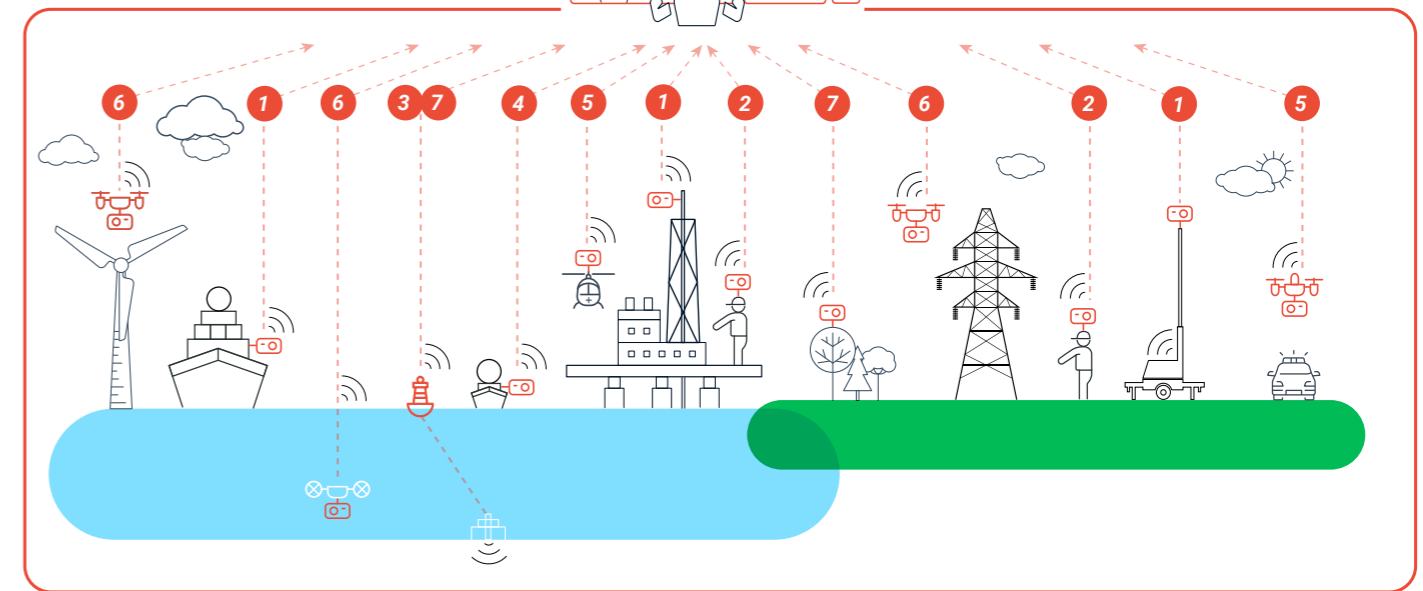
Nodestream™ is used by



1. Surveillance, CCTV
2. Remote Expert
3. Subsea Monitoring
4. USV Command and Control



5. Emergency Services
6. ROV/UAV Inspection and Control
7. Environmental Monitoring



Video Streaming - not still images

When it comes to video quality, Nodestream™ consistently reduces bandwidth consumption and costs in comparison with other applications.



*Benchmarking based on slow movement video

**H.265
HEVC**

Nodestream™ uses H.265, the streaming industry's foremost video compression standard, aligning with Harvest's goals of providing, future-proofed, cost-effective, advanced remote video services without compromising on video quality.

NODESTER™

Optimise and allocate your hardware and bandwidth with a tap

The Nodester™ control system delivers a visual, intuitive interface to manage and control device connections and settings within your ecosystem. The system is ultra-scalable, allowing management of single or multiple operations concurrently.



Key Features

- Manage video, audio and data connections
- Manage device settings
- Simple and intuitive drag and connect interface
- Ultra-scalable
- Simple tablet based deployment
- 100% proprietary software application

MEDIA ENCODER | AVR2™

Simple and secure point-to-web video distribution

AVR2™ provides simple plug and play usability, maximum video signal compatibility and complete customisation. Coupled with AVRLive™ online streaming system, multiple parties now have access to live video and data streams on virtually any connected mobile or desktop device over the web.

Key Features

- Software and hardware encoders
- Secure and easy method to stream live video to web
- Serial data input / display
- Intuitive user interface
- Plug-n-Play design
- SD / HD Options
- Configurable on-the-fly



MEDIA ENCODER | NQE™ MEDIA DECODER | NQD™

A streaming workhorse for critical real-time decision-making

The NQE™/NQD™ is 4-channel encoder/decoder designed to stream HD video “node-to-node” on a secure network. The NQE™/NQD™ are designed to be scalable. By connecting a series of units together you can livestream 4, 8, 12 or more channels - giving you as much coverage as you need.



Key Features

- Adaptable input configurations for video, audio, data and network
- Supports IP, HDMI, HD-SDI & COMPOSITE video formats
- Integrated IP intercom audio
- Industry proven with >50,000 operational hours logged

MEDIA ENCODER | NSR™

Compact, rugged, encoder designed for the most demanding environments

The NSR™ is an ultra-low latency encoder that delivers high-quality video and audio from digital sources at resolutions up to 1920x1080p60. The NSR™ encoder features a rugged IP67 rated weather proof chassis, complemented by high performance components, providing secure and reliable video and audio.

Key Features

- Rugged IP67 rated
- Passive cooling
- -20 to +70 deg C operating range
- Compact design
- Shock, vibration dust and water resistant
- Industrial connectors



When size matters

The NSX™ series provides usability, multi-channel video signal compatibility and complete customisation to easily enable remote operations through centralised management, all in a compact 1U form factor.



Key Features

- Up to 12 channels of 1080p video
- Supports IP, HDMI & HD-SDI
- Enterprise grade solution
- Redundant auto switching power supplies
- Operate as encoder or decoder
- 4, 8 or 12 Channel options
- 1U form factor

Lightweight, desktop livestreaming solution

A single channel encoder/decoder, the NSM™ is your simple, lightweight, desktop livestreaming solution delivering video and audio wherever you operate.

Key Features

- Operate as encoder or decoder
- On-the-fly bandwidth adjustment
- Web interface for configuration and diagnostics
- Real-time monitoring of bandwidth utilisation
- System capable of 60fps at 1080p
- Extremely robust error correction



Livestreaming audio for critical real-time decision-making even on restricted networks

The NCM™ system delivers a nodal IP intercom solution capable of working across any network. The system is ideal for maintaining cohesive communication between remote work-groups or stakeholders. It is purpose designed to operate and deliver quality audio over the poorest networks with incredible efficiency.



Key Features

- Simple intuitive interface
- Ultra-clear audio
- Ultra-scalable
- Ultra-secure

APPLICATIONS

Power your eyes in the field

Nodestream™ software applications can easily be loaded onto an array of industrial hands-free wearables, mobile devices and Windows computers. Nodestream™ software enables point-to-point video, data and voice communications for simultaneous review, live analysis and collaboration. Ensuring no one ever has to work alone or without expert advice.

Key Features

- Simple rapid deployment
- Intuitive interface and workflows
- Hands free collaboration
- Powerful control feature sets
- Connectivity across the entire Nodestream™ ecosystem





<https://harvest.technology>