Interoperability- Simplified

Creating a common vocabulary for smart devices

Pieter COETZEE
Director – IDIS Association

IDIS
Interoperability – simplified

Agenda

- IDIS Overview and History
- How IDIS delivers interoperability
- IDIS positioning in a world of standards
- The future of IDIS

“IDIS is the only true open, multi-vendor interoperability effort we can point to worldwide”

Navigant Research

IDIS

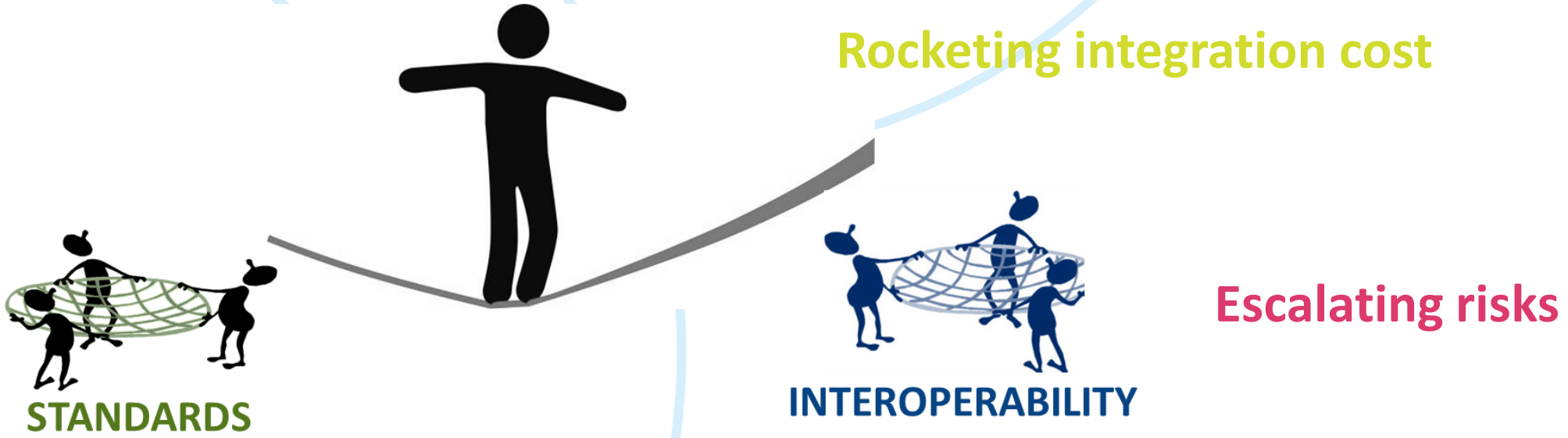
Interoperability – simplified

Challenges of Smart Meter Rollouts

Increasing complexity

Excessive Time-to-Benefit

Rocketing integration cost



Escalating risks

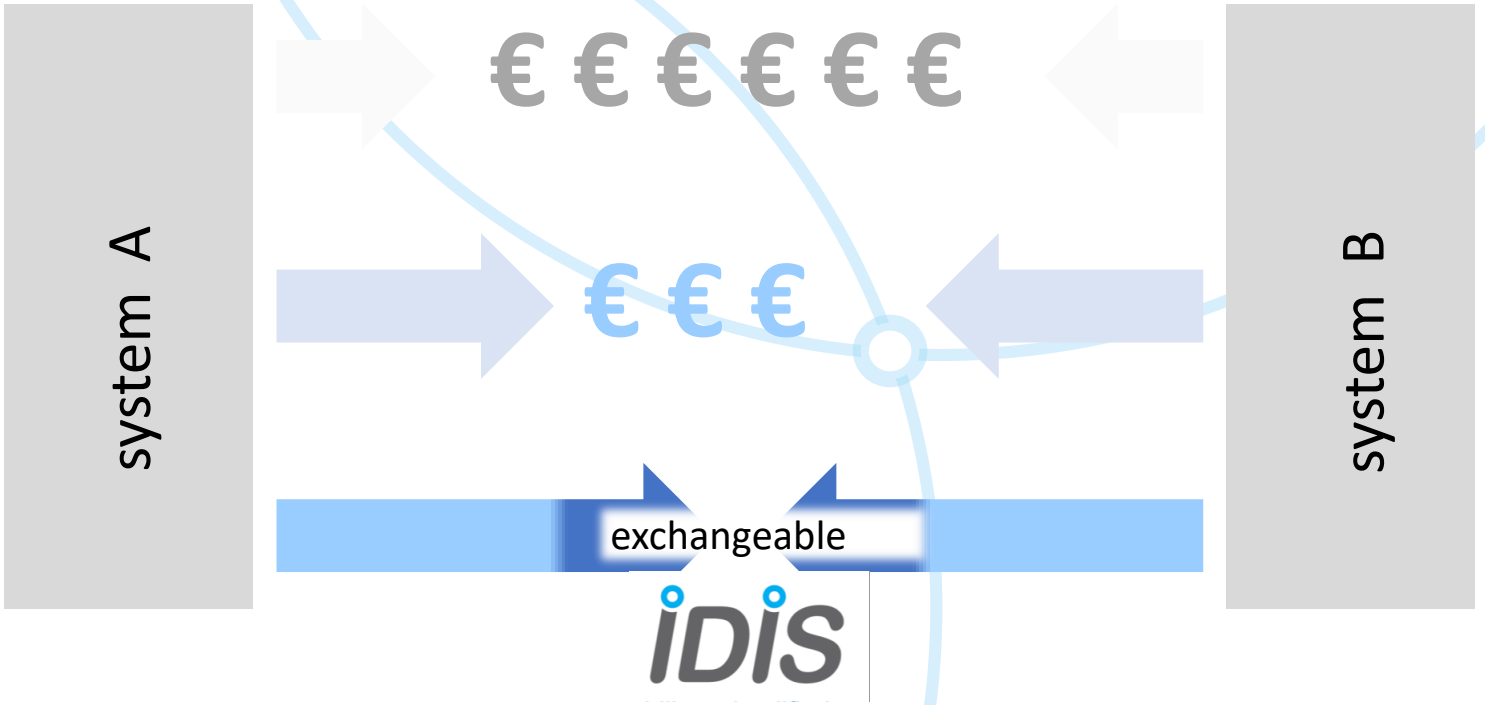
Vendor lock-in

Limited ability to evolve

Utility Services of the Future Demand More

- Smart meters are **critical infrastructure**
- Asset life of **10 years** or more expected
- Long term supply chain **sustainability** is a given
- Supporting the energy transition and **industry evolution** is mandatory
- Proven solutions that **minimize risk** are imperative

The Need for a Companion Specification



no standards

with standards

standards +
companion specification

Reducing Risk and Total Cost of Ownership

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Interoperable Device Interchange Specification

- 13 Core smart metering **Use Cases**
- **Proven** interoperability approach
- Supported by **multiple devices** and vendors
- Based on widely adopted IEC **DLMS/COSEM** specifications
- Established **testing methodology**
- Overlaying multiple **communication technologies**

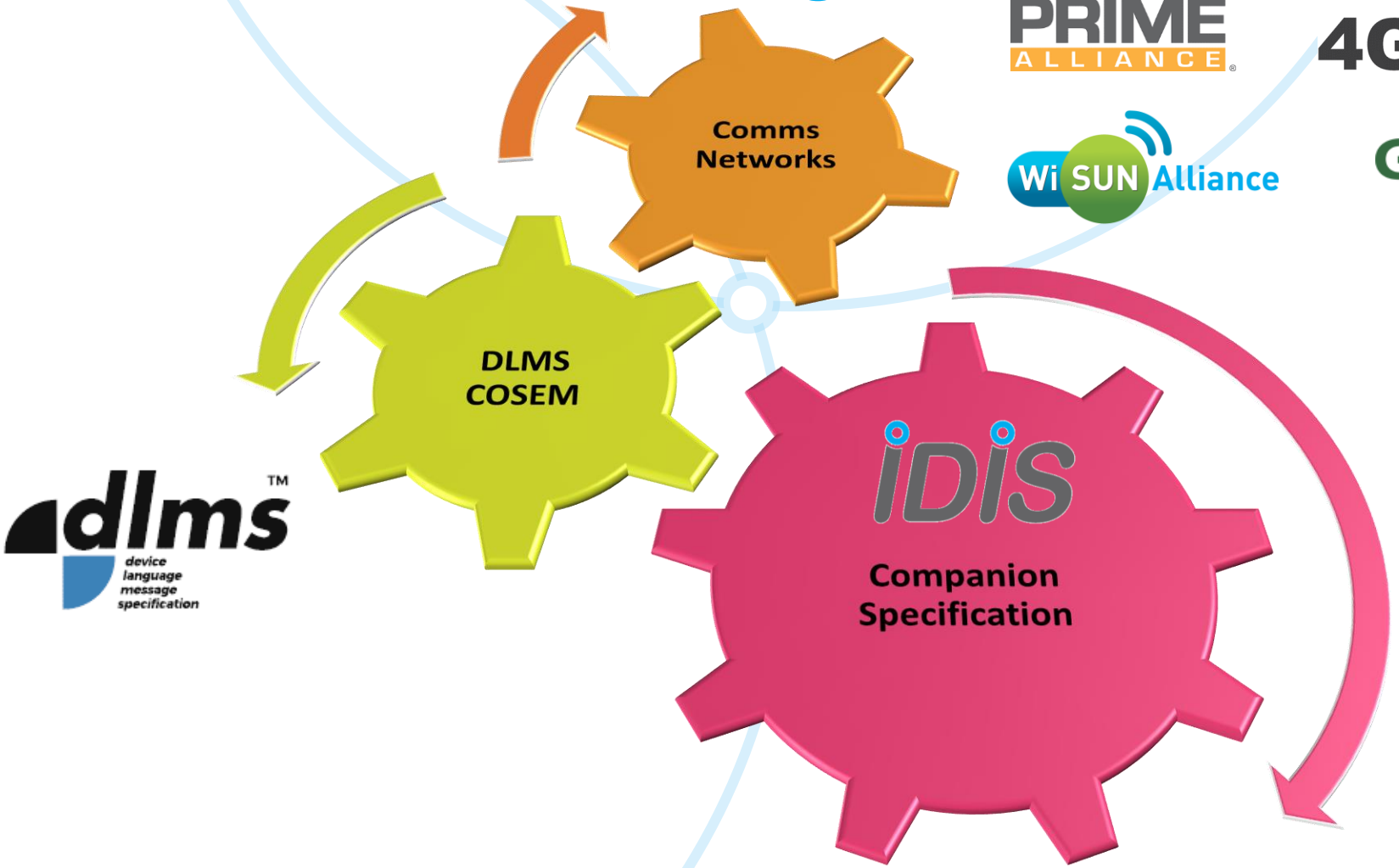
In a World of Standards: Positioning IDIS

- **Standardisation organisation**
  - Engagement point for industry stakeholders
  - Publishes **patent-free standards**, openly accessible

- **Standards User Association**
  - Beachhead coordinating towards the market
  - Elaborates and maintains open standards
  - Provides **conformity testing**

- **Interoperability User Association**
  - Publishes and maintains Companion Specifications
  - Transforms open standards into interoperable devices
  - Provides **interoperability testing**

Technology Agnostic: Supporting Multiple Communication Technologies



PRIME ALLIANCE

4G LTE

IPv4 IPv6

Wi SUN Alliance

G3-PLC Alliance

Providing Conformance and Interoperability Testing

CEN CENELEC ETSI
EUROPEAN STANDARDS ORGANIZATIONS

Standards

dlms™ device language message specification

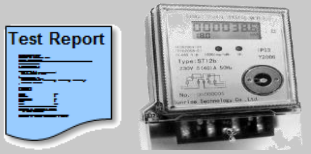
Companion Specification

Test Tools

Conformance Testing

Test Report

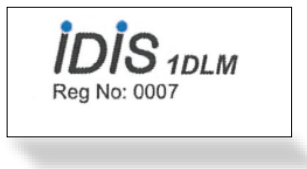
Interoperability Testing



Utilities

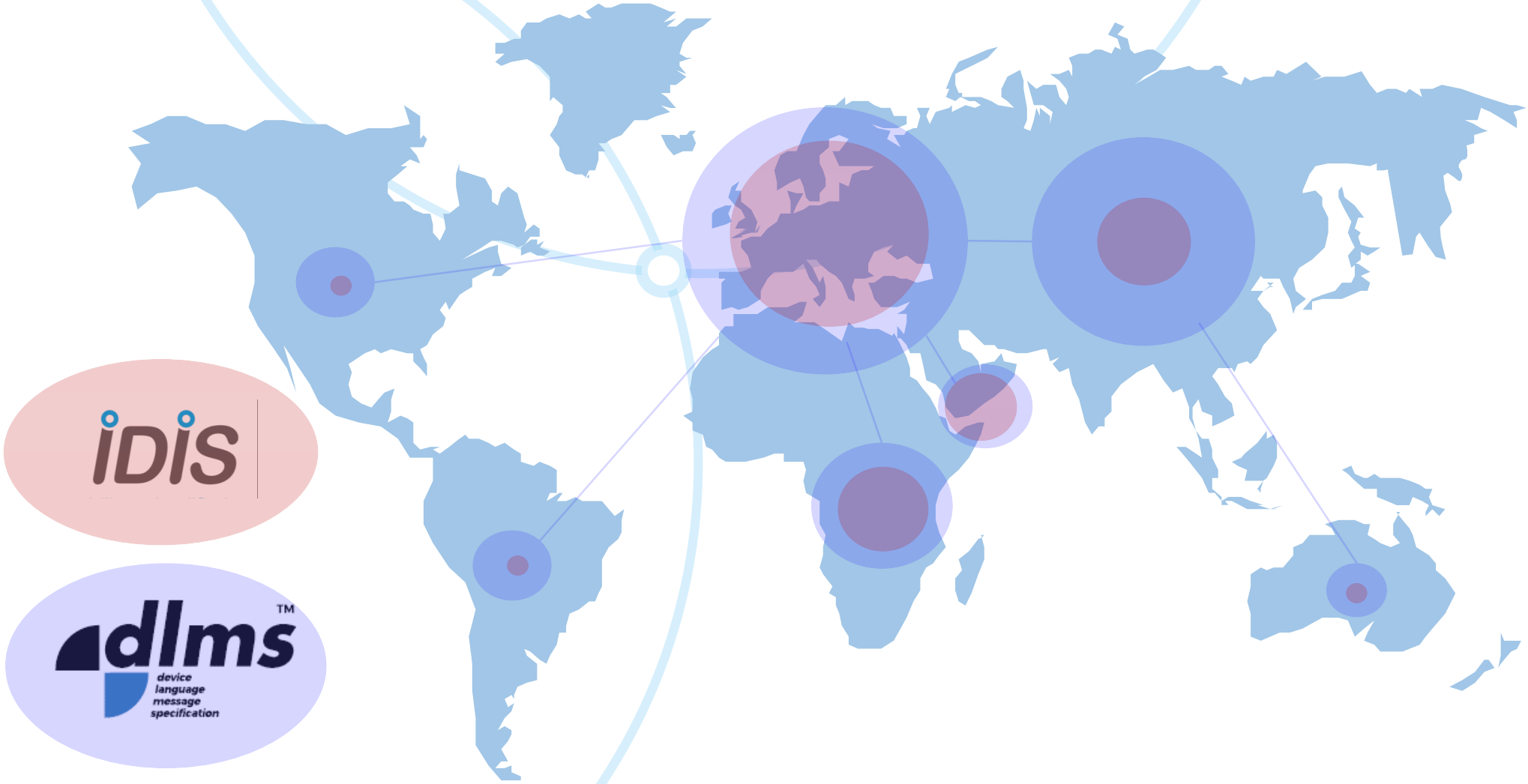
IDIS Profile
with extensions

Manufacturers



Global Impact

Extending DLMS/COSEM adoption through pragmatic interoperability



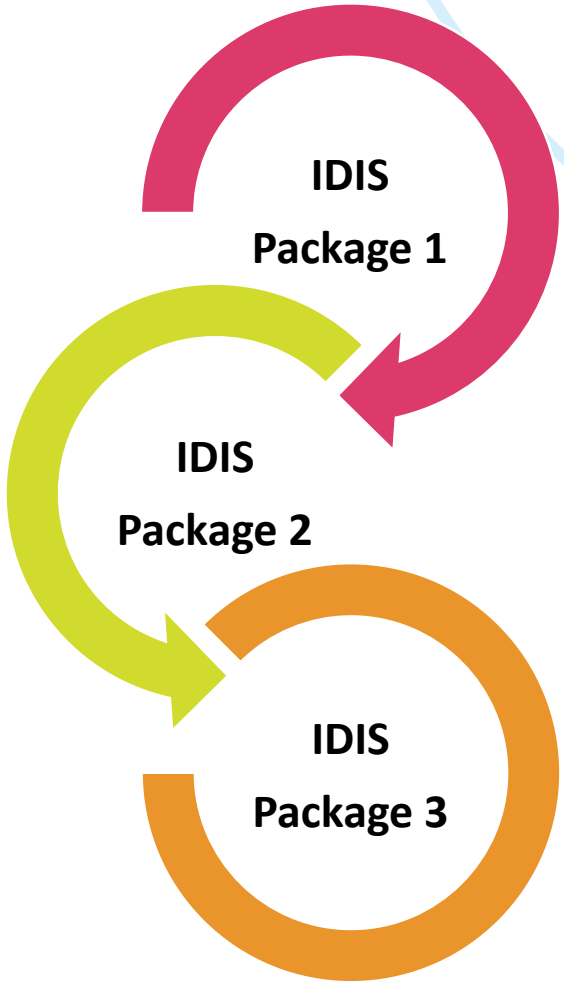
Summary: What we know today

1. A companion specification like IDIS is mandatory to ensure **interoperability**

2. IDIS is **technology neutral**, focusing on functionalities and use cases

3. The IDIS approach provides a **framework** for creating utility specific extensions

IDIS and the Future



- We require **more agility** to extend IDIS to address specific requirements
- We need **broader adoption** of the IDIS approach by utilities
- We need to be more **open and collaborative** with wider industry associations to ensure relevance and sustainability
- We need to shorten **time-to-benefit** to promote mass rollout

For the sake of what?

- **For Suppliers**
  - Improved **time-to-market**, from customization, implementation through to validation
  - Strategically aligned interoperability based on **IEC DMS/COSEM standards**

- **For customers**
  - Improved **business case**, de-risking and accelerating technology adoption
  - Ability to **extend use cases** and functionality,
  - Communication **technology independence**, with focusing on functional business value as opposed to technology
  - **No vendor lock-in**

- **For consultants and system integrators**
  - Standardized and **proven interoperability approach** to build a scalable, extensible practice
  - **Framework** to propose and manage new use cases and functionality

- **For the industry**
  - Remaining relevant and mainstream, supporting the **energy transition** and beyond

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IDIS

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