

TECHNICAL DATA SHEET

Neoception® Digital Twin Infrastructure

1. Product overview

- **Product name:** Neoception® Digital Twin Infrastructure (DTI)
- **Version:** 1.1.0
- **Solution Type:** Software Product
- **Short Description:** DTI enables the standardized and automated creation and provision of digital twins, e.g., based on the Asset Administration Shell (AAS), from any data sources. It avoids redundant data storage through on-demand generation of the AAS and is highly scalable.

2. Key Features (Excerpt)

- **Integration of Own Data Sources:** Generic API client as a development endpoint
- **Standardization, Mapping, and Modeling** of Data and Digital Twins:
 - Semantic standardization (e.g., based on ECLASS) and Rule- and context-sensitive data mapping for automating various scenarios
 - Import and management of submodel templates
 - Creation of context-based rules to select the required template group for automated AAS generation
- **Dynamic AAS Creation:** AAS are generated dynamically upon request (on-demand), based on applicable rules (template and data mapping)
- **Backoffice UI:** Dashboard for easy use of the software by non-IT staff
- **Security & Compliance:** Continuous CVE and security monitoring, access management, and backup functionality
- **Integrated Update Functionality:** Easy and fast installation of software updates
- **Integration into Existing and New Applications:** Standardized REST API (AAS Repository API, AAS Type II) – reduced to essential endpoints
- **Included Applications:** webbased AAS Viewer, .aasx Exporter (AAS Typ I), Snapshot application for registering AAS IDs in Discover and Registry Services and for persisting AAS in repositories

3. Technical architecture

■ **Deployment Options:** On customer infrastructure (e.g., on-premises or private cloud)

■ **System Requirements:**

- Kubernetes cluster (compatible with Zarf)
- SQL Server
- Secrets vault (compatible with external-secrets)
- Container Registry

■ **Software Interfaces:**

- **AAS API:** Standardized REST API for interaction with AAS (output)
- **Connectors:** API client for interaction with data sources (input)

■ **Compatible Platforms:** Browser-based UIs (current, common browsers)

4. Safety & maintenance features

■ **Continuous Product Development and Maintenance:** Updates installable via UI

■ **CVE and security monitoring** with processes in place for identified vulnerabilities

■ **User Management:** Own user management or integration with existing systems

■ **Backup Functionality:** Backup of database and configurations; restore as needed

5. Licensing model & support

■ **Licensing:** Subscription license (full license)

■ **Support:** Standard support during office hours (Mon–Fri), Optional 24/7 support available

■ **Update Cycle:** Regular security patches and feature updates

Are you interested? You can find more information about the
Neoception® Digital Twin Infrastructure
here

