# NOR-STA is a web application supporting assurance case management


NOR-STA supports:

- ✓ Development of modular assurance cases in distributed teams
- ✓ Integration of arguments and evidence in internal and external repositories
- ✓ Use of GSN diagrams to present the argument
- ✓ Self-assessment and third-party assessment
- ✓ Reporting assurance cases and the results of the assessment
- ✓ Use of argument templates
- ✓ Integration of assurance cases with other tools
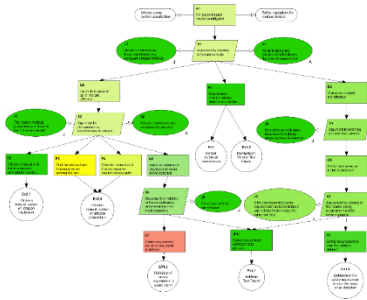
Argument development

The argument metamodel implemented in NOR-STA is compliant with OMG SACM (Structured Assurance Case Metamodel) and supports development of assurance cases using two forms of argument presentation:

- – Graphical form: GSN Community Standard version 3 (Core GSN, Modular Extension, partially Patterns)
- – Hierarchical argument tree for GSN, TRUST-IT and CAE
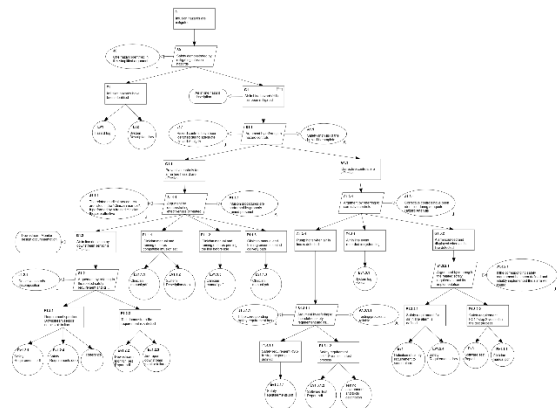
Management of complex modular arguments

With NOR-STA you can divide large arguments into modules and manage them separately. For each module you can individually assign permissions for users to edit them, provide evidence, make assessment or browse only

Argument modules can be bound with interfaces and the assessment of supporting modules will be automatically reported to high-level argument modules. NOR-STA implements three types of interfaces:

- – Away elements,
- – Support by module
- – Support by contract
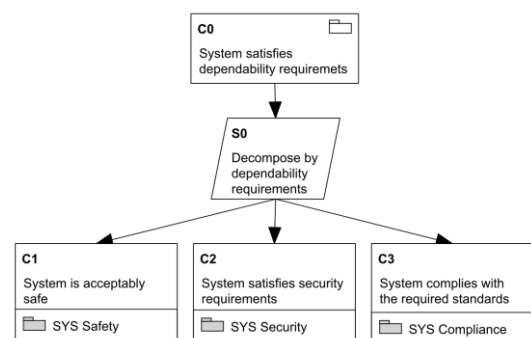
Integrate your arguments with evidence in your production repository

The argument needs to refer to evidence produced in the system life cycle which is stored in dedicated repositories, usually in version control systems.

NOR-STA provides ready to use integration with SharePoint, Confluence and Jira. Integration with other types of repositories can be provided on request.

NOR-STA monitors changes of evidence in integrated repositories, reports them and enables systematic change management.
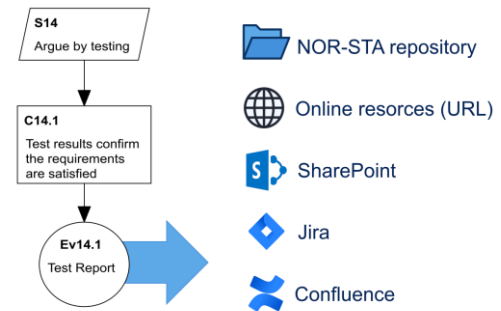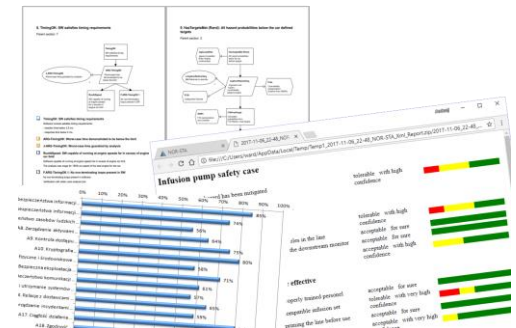

Argument assessment

- ✓ Integrated argument assessment functions
- ✓ Sharing comments to argument elements
- ✓ Control of argument changes
  and the need for reassessment
- ✓ Assessment methods include uncertainty,
  scoring and others
- ✓ Automatic aggregation of assessment results
- ✓ Reporting assessment results
- ✓ Control of negative and missing assessments
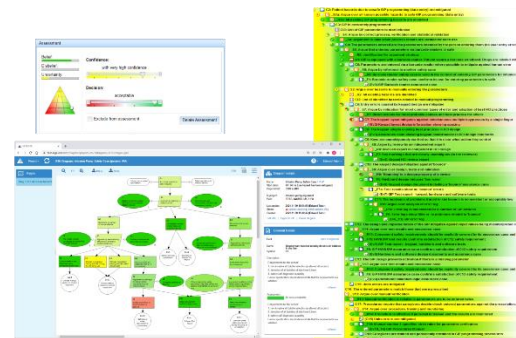
Reporting the progress and results

- ✓ Assessment visualization with a color scale
- ✓ Reports to MS Excel, Word, PDF and HTML
- ✓ Custom report templates fed with XML data
- ✓ Describing the argument and assessment results
- ✓ Custom report content: GSN diagrams, assessment,
  charts, links to evidence
- ✓ Programmable HTML reports with XSL scripts

Cooperation and user permission management

- ✓ Sharing comments and cooperation in argument
  development and assessment
- ✓ Role-based access control (RBAC)
- ✓ Predefined roles like manager, editor, auditor, reader
- ✓ Roles granted at the level of folders
  or individual argumentation modules
- ✓ Customizable user roles with over 40 permissions
 to specific actions

Reuse with templates

- ✓ Templates enable the reuse
  of the argument development best practices
- ✓ Use parametrized templates for variants
  of your systems and products
- ✓ Update arguments to new template versions
- ✓ Manage template development process
  with multiple levels of templates
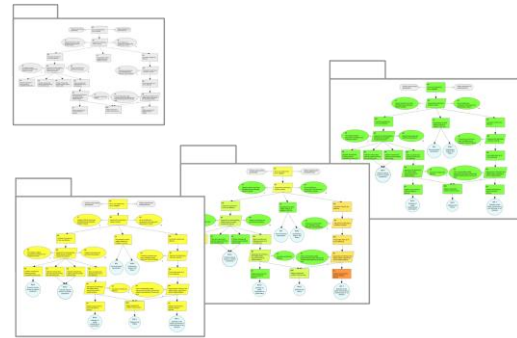

Version control and change tracking

- ✓ Full change history and project log
- ✓ Labeling versions of modular assurance cases
- ✓ Browsing argument versions
- ✓ Restoring chosen versions of the argument
- ✓ Monitoring argument and evidence changes
- ✓ Invalidating assessment of affected parts
  of the assurance case
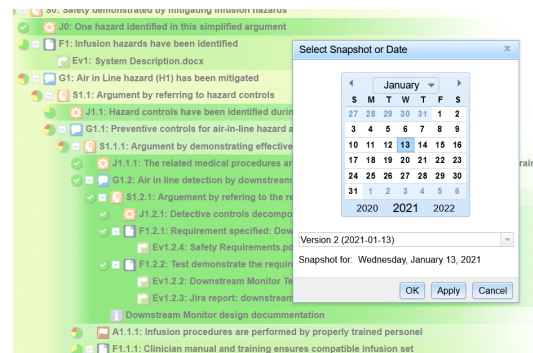

Customizable system assurance monitoring

Assurance case may be fed with live data from any evidence management system or production system monitoring. Data can be automatically transferred into an argument and can be used to:

- ✓ Update the evidence data
- ✓ Update the assessment
- ✓ Deactivate or activate argument sections
- ✓ Modify argument structure
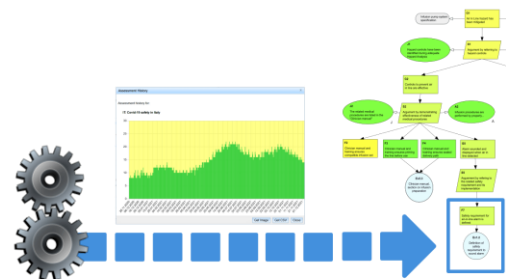
Integration with other systems

- ✓ Deployment in Kubernetes
  or cloud environment (AWS, Azure)
- ✓ Your systems may use NOR-STA API to:
  - Read your assurance cases from NOR-STA
  - Develop and update arguments
  - Provide evidence
- ✓ XML data import and export
- ✓ Integration with SharePoint,
  Atlassian Jira and Confluence
- ✓ User authentication with Entra ID (former Azure AD)
  or other identity providers
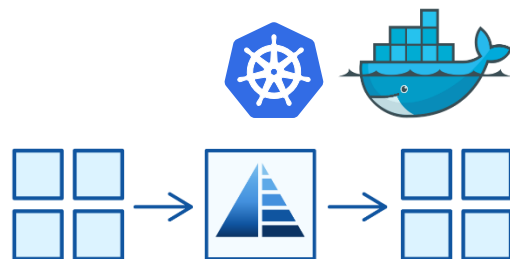
Platform open for integration and customization

NOR-STA has an extendable architecture open for integration with other systems. It can be easily deployed in Docker or Kubernetes environment (available from May 2024), and integrated in your IT environment to create an effective tool chain.
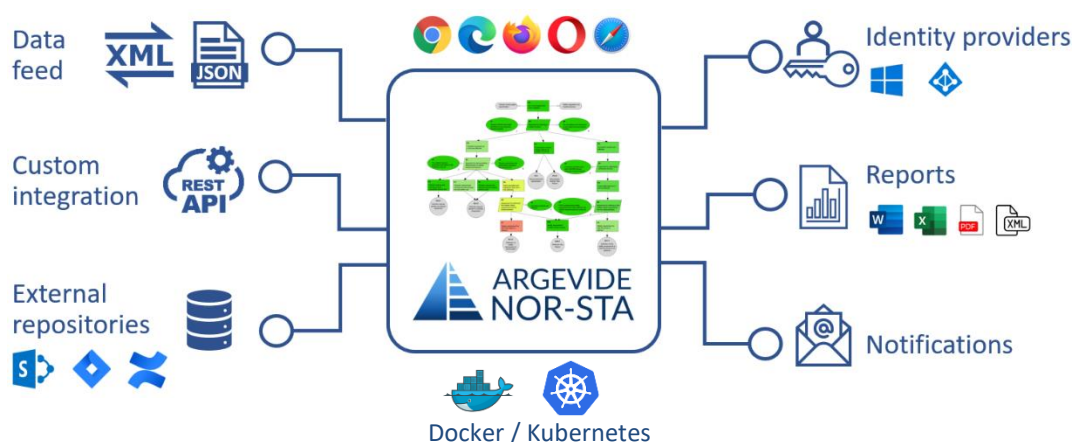
Argevide services

We offer:

NOR-STA SaaS services

You can start from a single user to develop assurance case with NOR-STA online access. You can use all NOR-STA features including modular arguments and evidence, development of your own templates, assessment and reporting. You can add new users and any time and manage their permissions.

NOR-STA Server SaaS services (private cloud)

Your NOR-STA services will be available at an individual internet address. The configuration of the services resources can be tailored to your needs. That allows to customize and integrate the services with other systems. This solution offers higher security level and options for services guaranties (SLA).

NOR-STA license for on-premises hosting

NOR-STA licenses are also available to install the system on a server in your network or in cloud environment. You will manage NOR-STA on your own and it will operate within your corporate network. This is helpful when integrating NOR-STA with other systems.

Customization and integration services

We provide customization and integration services to adapt the system to your needs and your IT environment. NOR-STA API documentation is also available to let you develop applications interacting with NOR-STA. We can assist in your integration projects and also develop software modules for you.

You will find more information on our website: www.argevide.com.

Please contact us at office@argevide.com to get more information about NOR-STA.