



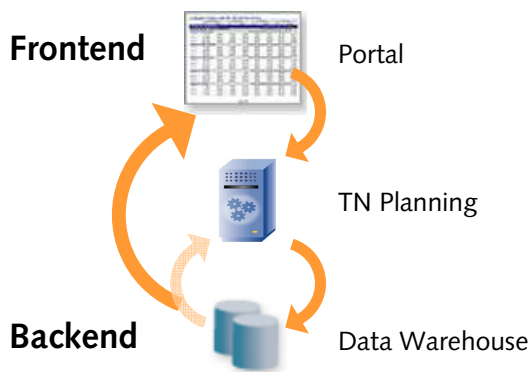
System Integration

Its extensive functionality in the areas of configuration, data entry, calculation, group consolidation, workflow control, analysis, and reporting make TN Planning a powerful tool for the creation of custom-tailored planning and consolidation solutions. However, high performance alone is not sufficient. The solutions created with TN Planning also have to be seamlessly integrated into the customer's system environment.

Thus, TN Planning was developed so that the user interface can be embedded in the business intelligence portal favored by the client (**front-end integration**). The data entered and processed further with TN Planning can be published workflow-supported in the desired database or in the corporate data warehouse (**back-end integration**). Furthermore, strict attention was paid to **platform independence** and the support of **standardized interfaces**.

Front-end integration

- **Web interface:** User interface based on pure HTML and JavaScript without active components on client side.
- **Portal integration:** Runs on all portals that support the incorporation of HTML frames, such as SAP NetWeaver Portal.
- **Single sign-on:** No need for renewed authorization of a user already logged into the portal thanks to takeover of the identity forwarded by the portal.
- **Business Objects add-in:** Pre-configured integration into the Web interface of Business Objects XI (see product brochure about TN Planning Add-in for Business Objects).
- **MicroStrategy plug-in:** Pre-configured integration into the Web interface of MicroStrategy (see product brochure about TN Planning Plug-in for MicroStrategy).



Back-end integration

- **Supply with actual and metadata:** Pre-configured interfaces for the supply of the planning process with current actual and metadata as planning basis.
- **Workflow-supported publication of plan data:** Upload of the data input and processed further in the planning process in a data warehouse based on SAP BW, Microsoft SQL Server, IBM DB2, Oracle, MySQL, Teradata, and others.
- **User management:** Automated user and rights management by use of existing user directories (e.g. Active Directory) via LDAP.

Platforms, language and interface standards

- **TN Planning Server:** MS Windows, Unix, Linux.
- **TN Planning Client:** MS Windows, Linux.
- **Web Server:** MS Internet Information Services and Apache HTTP Server.
- **Web Browser:** MS Internet Explorer and Mozilla Firefox.
- **Language and interface standards:** XML, LDAP, DCOM, C and Java API, ODBC Provider, OLE DB for OLAP Consumer.