

Understanding SAP BW InfoObjects

A detailed technical overview for
consultants

What is an InfoObject?

- Core building block in SAP BW to model business data.
- Represents descriptive or numerical information (e.g., Customer, Revenue).
- Used across InfoProviders, Queries, Transformations, etc.
- Reusable, consistent, and optimized for performance.

Types of InfoObjects

- Characteristics – Business entities like Customer, Product.
- Key Figures – Numeric values such as Sales, Revenue.
- Time Characteristics – Calendar day, Fiscal Year.
- Units – Currency, Unit of Measure.
- Technical Characteristics – Request ID, Record Mode.

Core InfoObject Settings

- General: Data Type, Length, Description.
- Master Data: With/without master data, Attribute types.
- Text: Enable multilingual descriptions.
- Time Dependency: Time-based validity for attributes or texts.
- Compounding: Links InfoObjects hierarchically.

Main InfoObject Tables Overview

- /BI0/SXXXX – SID table: stores SID <-> characteristic key mapping.
- /BI0/PXXXX – Time-independent attributes (no SID).
- /BI0/QXXXX – Time-dependent attributes (no SID).
- /BI0/TXXXX – Texts table: supports multiple languages.
- /BI0/HXXXX – Hierarchy header, /BI0/IXXXX – Hierarchy structure.

Technical Structures of Key Tables

- /BI0/SXXXX: SID, XXXX (key), OBJVERS.
- /BI0/PXXXX: XXXX (key), static attributes.
- /BI0/QXXXX: XXXX (key), DATEFROM, DATETO, dynamic attributes.
- /BI0/TXXXX: XXXX, LANGU, DATETO, SHTEXT, MEDIUM, LONG.
- SID is used only in /BI0/SXXXX; not present in P, Q, or T tables.

Table Key Fields and Usage

- /BI0/SXXXX – Keys: SID, InfoObject Key.
- /BI0/PXXXX – Keys: InfoObject Key.
- /BI0/QXXXX – Keys: InfoObject Key, DATEFROM, DATETO.
- /BI0/TXXXX – Keys: InfoObject Key, LANGU, DATETO.
- SID used for faster joins in reporting and data targets.

Example: OCUSTOMER InfoObject

Data Flow

- /BI0/SOCUSTOMER – SID table (Customer <-> SID).
- /BI0/POCUSTOMER – Static attributes (Country, Industry).
- /BI0/QOCUSTOMER – Time-based (Account Manager).
- /BI0/TOCUSTOMER – Descriptions in different languages.

Key Differences Summary

- SID only exists in /BIO/SXXXX.
- P table = time-independent attributes.
- Q table = time-dependent attributes.
- T table = descriptions (texts) with optional time/language.
- All use InfoObject key, not SID.

Final Notes

- Use Q-tables for changing attributes like manager or region.
- Keep P-tables for stable attributes like country.
- Minimize navigational attributes for better performance.
- Always validate compounding logic in modeling.
- SID resolution is critical for efficient queries and joins.

Diagram: InfoObject and Master Data Relationships

