

Information Technology Policy Data Modeling Products and Standards

NumberEffective DateSTD-INF003AAugust 2, 2005

CategorySupersedesInformationAll Prior Versions

Contact Scheduled Review

RA-ITCentral@pa.gov September 2023

1. Purpose

Standards document to *ITP-INF003*, *Data Modeling Standards* details the data modeling products and standards.

2. Standards

Agencies should standardize on the current architecture products and standards identified below.

2.1 CURRENT

These technologies are supported by the current standard and meet the requirements of the architecture. They are recommended for use.

Technology	Platforms	Category	Technology Classification
Erwin Data Modeler (Quest)	Access, IBM DB2, Informix, My SQL, MS SQL	Forward & Reverse Engineering	Current
(4000)	Server, Netezza, Oracle,	3	
	<u>PostgreSQL</u> , <u>Sybase</u> , and others via ODBC/ANSI SQL	Data Warehouse Dimensional	
	,	Modeling Model Management	
IBM Rational	A wide variety of platforms including ORACLE, DB2,	UML	Current
	SQLSERVER.	Forward & Reverse	
		Engineering Model Management	
			

Technology	Platforms	Category	Technology Classification
Enterprise Architect (Sparx Systems)	IBM DB2, Firebird, InterBase, Informix, Ingres, Access, MS SQL Server, MySQL, SQLite, Oracle, PostgreSQL, Sybase	IDEF1X, UML DDL, Information Engineering Entity Relationship Diagrams (ERDs) Model Management	Current
Visio (Microsoft)	General Logical Level Modeling	UML Entity Relationship Diagrams (ERDs)	Current
Power BI (Microsoft)	Access, IBM DB2, Informix, Hitachi HiRDB, Firebird, Interbase, MySQL, MS SQL Server, Netezza, Oracle, PostgreSQL, Sybase, Teradata, Visual Foxpro and others via ODBC/ANSI SQL	Conceptual, Logical, and Physical model management	Current
ER/Studio (Embarcadero Technologies, Inc.)	Access, IBM DB2, Informix, Hitachi HiRDB, Firebird, Interbase, MySQL, MS SQL Server, Netezza, Oracle, PostgreSQL, Sybase, Teradata, Visual Foxpro and others via ODBC/ANSI SQL	IDEF1X, IE (Crows feet) Model Management	Current
SQL Server Management Studio (Microsoft)	MS SQL Server	Model Management	Current
MySQL WorkBench (Oracle)	MySQL	IDEF1X, IE (Crows feet), UML, and more Model Management	Current
Oracle SQL Developer (Oracle)	Oracle, MS SQL Server, IBM DB2	Barker, IE (Crows feet), and Bachman Model Management	Current
PowerDesigner (SAP)	Access, Greenplum, Apache Hive, HP Neoview, IBM DB2, Informix, Ingres, Interbase, MySQL, Netezza, NonStop SQL, Oracle, PostgreSQL, Red Brick Warehouse, SAP business Suite, SAP Hana, SAP Adaptive Server Enterprise, SAP IQ, SAP SQL Anywhere, MS SQL Server, Teradata	IDEF1X, IE (Crows feet), and more Model Management	Current

Technology	Platforms	Category	Technology Classification
SAP HANA Studio	SAP HANA	Data Modeling and Data Management	Current
SAP Analytics Cloud	SAP HANA, SAP business Suite, SAP Adaptive Server Enterprise, SAP IQ, SAP SQL Anywhere, Oracle, MS SQL, ODATA, Cloud Platforms (GPS, AWS and Azure) SQL Dataset, Salesforce, Google Big Query, SAP SuccessFactors, Cloud Storage, CRM, Custom Widget, story, Value Driver Tree	Analytical Applications, Planning, Visualization, Predictive, Dashboard, Digital Boardroom, Modeling and Stories	Current
Data Intelligence	SAP ERP, Suite on HANA, Non- SAP Business Applications, SAP and non-SAP Data Base, Open Source, Python, ODATA, Cloud Platforms (GPS, AWS and Azure), SAC	Data Modeling, Data Orchestration, Machine Learning, Governance and Integration	Current
SAP Business Application Studio	SAP (Hanna, Fiori, Mobile, Other)	Data Modeling and Data Management	Current

2.2 CONTAIN

These technologies no longer meet the requirements of the current architecture and are not recommended for use. They shall be phased out over time. No date has been set for their discontinuance.

Technology	Platforms	Category	Technology Classification
-	1	1	

2.3 RETIRE

These technologies are being phased out. Plans shall be developed for their replacement, especially if there is risk involved, such as lack of vendor support. A date for retirement has been set.

Technology	Platforms	Category	Technology Classification
Oracle Designer	ORACLE		Retired 07/18/22
Popkins System Architect			Retired 12/31/20

2.3 EMERGING / RESEARCH

Emerging technologies have the potential to become current standards. At the present time, they shall be used only in pilot or test environments where they can be evaluated. Use of these technologies is restricted to a limited production mode and requires approval of a waiver request. Research technologies are less widely accepted, and time

will determine if they become a standard.

Technology	Platforms	Category	Technology Classification
Synapse (Microsoft)	Access, IBM DB2, Informix, Hitachi HiRDB, Firebird, Interbase, MySQL, MS SQL Server, Netezza, Oracle, PostgreSQL, Sybase, Teradata, Visual Foxpro and others via ODBC/ANSI SQL	IDEF1X, IE (Crows feet) Model Management	Emerging/ Research
Dataverse (Microsoft)	Access, IBM DB2, Informix, Hitachi HiRDB, Firebird, Interbase, MySQL, MS SQL Server, Netezza, Oracle, PostgreSQL, Sybase, Teradata, Visual Foxpro and others via ODBC/ANSI SQL	IDEF1X, IE (Crows feet) Model Management	Emerging/ Research

This chart contains a history of this publication's revisions.

Version	Date	Purpose of Revision
Original	08/2/2005	Base Document
Revision	11/18/2010	Updated to add Sparx as current standard
Revision	05/13/2021	ITP Refresh
Revision	09/09/2022	ITP Refresh
		Reformatted Table for Accessibility
		Added Power BI and SAP Business Application Studio to current standards
		Moved Oracle Designer from contain to retire
		Added Synapse and Dataverse to emerging/research standards