

IT Classification Technology List

May 2023

A technology is an IT specialization that generally requires six months or longer to master.

Examples listed are representative of the products and tools that may be used by employees working in the specified technology. These examples are not exhaustive. Other products and tools can be adopted and used.

Database Administration Specialist Series (6995)

Technology	Description	Examples
Data Warehouse	Denormalized data resource used for analytical reporting and business intelligence	SAS, Teradata, Snowflake, Cognos, Oracle, Hummingbird, SQL Reporting, Tableau, Scribe, R
Database Support	General database administration duties including software deployment and maintenance, testing, problem resolution, performance tuning, backup & recovery, data migration, data modeling, documentation, development of stored procedures, query/view creation, and security, activity monitoring, and training of users	Toad, DBeaver, SQL Toolbelt, ERWin, Oracle designer, Visio, DB artisan, BMC Software, BMS utilities, File Manager, Move for DB2, TimeFinder, FlashCopy, DB2 Connect, Imperva, Data Vault, BCV Clone, Embarcadero DB Powerstudio
DB2	IBM relational database management system that runs on Unix, Linux, Windows, and z/OS platforms	DB2 Connect, Omegamon, BMC Catalog Manager, BMC Change Manager, BMC Database Manager, IBM Admin Tools, Log Analyzer, AQT, Toad for DB2, Opertune, Extended Buffer Manager (XBM(TM)), DB2 Compare, Nsynch, TSM, Universal Command, SQL
Extract, Transform, and Load (ETL)	Creation and management of automated data management processes where data is collected from a source database, cleaned, reformatted, and loaded into a new data store.	Informatica, SSIS, Oracle Data Integrator, Fivetran, Azure Data Factory, Oracle Goldengate, StreamSets
IMS	IBM hierarchical database management system that runs on z/OS mainframe platform	BMC IMS Utilities, Strobe, IBM APA, Omegamon, BMC Tools, TACT ezdb2, QMF, ESSO Products APA
Open Source	Open-source database management systems	MySQL, Vertica, SQLite, Hadoop
ORACLE	Oracle Corporation relational database management system	Oracle enterprise manager, application express, RMAN, PL SQL, SQL developer, Toad, SQL, Putty and MobaXterm. Golden gate
SQL Server	Microsoft relational database management system that runs in the Windows Server environment	SQL Server Management Studio, SQL Sentry, Vantage, Tivoli, Snap Manager, Azure SQL Database

SYBASE	A relational database management system and related tools marketed by SAP	ASE, OEM, RAC, Partitioning, Encryption
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Software Development Specialist Series (6994)

Technology	Description	Examples*
Amazon AWS	AWS provides a comprehensive suite of services and solutions to run sophisticated and scalable applications to help achieve better business outcomes.	List of Tools: https://aws.amazon.com/solutions/
Business Intelligence and Data Analytics	Analytics, business intelligence, and performance management tools allow business users to make better informed decisions. Reporting and data visualization tools support custom report creation, ad-hoc report authoring, and multi-dimensional information exploration. Statistical analysis tools support hypothesis testing, forecasting, and operations research.	Cognos, Tableau, Power BI, Python, R, Microfocus, Crystal Reports, Tableau, MicroStrategy, SAS, SPSS, SSRS
Case Tools	Software design and development tools that provide integrated data and process design and modeling capabilities, code generation, and a run time environment	Pacbase, CA AllFusion Gen, Cold Fusion, Telon
Content Management	Business process, content and document management solutions that allows content to be defined, modified, printed, and routed within specified business processes	Hyland OnBase, Microsoft SharePoint, FileNet, Adobe Experience Manager, Pitney Bowes StreamWeaver, Crawford, DocAve, Ektron, Intellinetix, Conga, Kentico
Customer Relationship Management	Software or service designed to manage and coordinate contacts with users/customers/clients	SalesForce, MS Dynamics 365
Data Integration Tools	Creation and support of automated processes through which data is extracted, transformed, and loaded from one data store to another	Informatica, MuleSoft, Azure Data Factory
Electronic Data Interchange (EDI)	Data encoding standards for the transmission of structured business data using established formats and protocols	Foresight (HIPAA Validator Desktop and EDISIM), Gentran

Technology	Description	Examples*
Geographic Information Systems	Geographic Information System (GIS) software and services provide for creation of geoprocessing services and render spatial content in mapping applications.	ArcGIS Server, ArcSDE, ArcGIS Engine, ArcGIS API for Microsoft Sliverlight, ArcGIS Server ADF, Address Broker, Trimble
Google Cloud	Google Cloud delivers secure, open, intelligent, and transformative tools to help enterprises modernize for today's digital world.	List of Tools: https://cloud.google.com/solutions/
IBM Mainframe Development Tools	The IBM mainframe development environment is used to support legacy applications	COBOL, JCL, Rexx, TSO, ISPF
Integration Middleware	Software that provides services to applications beyond those available from the operating environment. Common examples include message transmission, application integration, and data integration.	MQ Series, XML Gateway, Biztalk, JSON, JBoss, MuleSoft
Intelligent Automation	Tools that facilitate the automation of business, customer service, and IT processes	UIPath, Microsoft Bot Framework, Oracle Intelligent Advisor, MuleSoft
Java	A cross-platform programming language and software platform	Rational Application Developer, Eclipse, J Builder, TIBCO Business Works
Low Code / No Code	Tools that support the creation of applications through the use of a graphic interface	SalesForce, Microsoft PowerApps, Oracle Intelligent Advisor, UIPath
Microsoft .Net Environment	A multi-language software development and runtime environment	C#, Visual Studio, Team Foundation Server, Git, .Net Core, Entity Framework, Dapper, Azure DevOps, Azure Functions, Azure App Services, MVC
Microsoft Azure	Microsoft Azure is a set of cloud services to help meet business challenges	List of Tools: https://azure.microsoft.com/en-us/
Oracle Development Suite	Oracle application development suite	Oracle Forms, J Developer, Designer, Reports, Discoverer, Business Intelligence Beans, Oracle Primavera Unifier
Enterprise Resource Planning	Integrated applications that manage primary business processes such as finance and human resources	PeopleSoft, Oracle Fusion

Technology	Description	Examples*
Software Testing/QA Tools	Software testing and quality assurance tools used for functional testing, integration testing, test planning, automated testing, and management of testing artifacts	HP Testing Suite, Load Runner, HPQC, Microsoft Test Manager, NeoLoad, SmartBear, Selenium, DevOps, BlazeMeter, Apache JMeter, Azure Load Testing, Katalon Studio, Microfocus UFT One
Structured Query Language (SQL)	A non-procedural, declarative language designed for accessing and managing relational databases	QMF, SQL Server Management Studio, Oracle SQL Developer, TOAD, PL-SQL Developer, IBM Data Studio
Web Development	Tools that support the creation of web pages and applications	HTML, JavaScript, JSON, JQuery, Dreamweaver, Notepad++, Visual Studio Code, Angular, Blazor, TypeScript, CSS, Django

Infrastructure Specialist Series (6993)

Technology	Description	Examples*
Application Distribution and Provisioning	Endpoint application software packaging, deployment automation and standardization	ZenWorks, SMS, SCCM/MECM
Cloud Services Administration	Design, configuration, deployment, testing, integration, automation, documentation, and support for cloud hosting environments	Amazon Web Services (AWS), Microsoft Azure, Google cloud, Oracle cloud, Citrix
Collaboration / Conferencing	Implementation and support of enterprise-scale collaboration facilities that provide for virtual meetings, conferencing, content management, desktop tool integration, webinars, and portal capabilities	Teams, Teams Voice, Teams Rooms, SharePoint, Poly, WebEx, Zoom, Skype
Computer / Digital Forensics	Computer forensics seeks to explain the current state of a computer system, storage medium, electronic document, or a sequence of packets on a computer network.	BackTrack, DD, EnCase, FTK Imager, Sleuth Kit, SANS Investigative Forensic Toolkit (SIFT).
Contact Center Systems	Deployment and support of enterprise call center technologies including IVR, ACD, and demand management	CBTS, Aspect/Rockwell Spectrum RCS, Aspect/Rockwell REN, Astute, Finesse, Jabber, Zoom, Verint Workforce Management
Directory Services	Installation, configuration, maintenance, and support for directory products	iMonitor, DSREPAIR, LDAP Browser, Microsoft Active Directory
Document Generation and Scanning	Support for and maintenance of printers, scanners, and multi-function paper handling devices and associated software	IBM, Lexmark, HP, Dell and Xerox, Kodak, Dakota, RightFax FileNet, Kofax
Electronic Data Interchange (EDI)	Data encoding standards for the transmission of structured business data using established formats and protocols	Foresight (HIPAA Validator Desktop and EDISIM), Gentran
Endpoint Configuration	Design, configuration, deployment, testing, automation and patching for endpoint devices	Operating systems, group policy settings, InTune, WSUS, VMWare Airwatch

Technology	Description	Examples*
Endpoint Customer Support	Hands-on administration, diagnosis, and repair of personal computers, handheld devices, software, and related peripherals; Resolution of customer questions or problems	Absolute (fka Computrace), SCCM/MECM, BeyondTrust, VMWare AirWatch, Microsoft InTune, Intel VPro
Enterprise Content Management	Capture, management, storage, and delivery of electronic content and documents	Hyland OnBase, FileNet, Domino, Altiris, Drupal, WordPress, Apache web server, Kentico, Microsoft SharePoint
Fixed/Mobile Telecommunications	Satellite, portable, and mobile digital voice, and data devices including repair, configuration, management, support, and provisioning of fixed/mobile of telecommunications devices, both wired and wireless	Motorola CPS, MA/COM programmer, endec pro, RUG 3, MARCS, Blackberry Servers, Handheld Devices, Apple DEP, VMWare AirWatch, Microsoft InTune
GIS	Geographic Information System (GIS) software provides spatial data services	ArcGIS Server, ArcSDE, Address Broker
IBM Mainframe	IBM Mainframe services, configuration, utilities, monitoring, operation, scheduling, and support	z/OS, SMPE, JCL, z/OS commands, JES, DFP, HSM, SMS, RACF, SMPE, VTAM, SMPE, TIVOLI, CompuWare, BMC, TMS, Vantage Alerts Monitor
Identity & Access Management	Authentication of authorized people and processes, granting of system and service access privileges based upon identity	LDAP, eDirectory, Active Directory, IDM, Windows Identity Foundation, RACF, Tivoli Identity Manager, Tivoli Access Manager
Integration Middleware	Integration middleware facilitates process inter-operation across disparate environments including message and data sharing between applications.	Filenet, WebSphere, Oracle Application Server, TIBCO, MQ Series, Biztalk, IMS, CICS, VTAM, IDM, Weblogic, JBoss, AnyPoint MuleSoft
IT Service Management Tools	Support for integrated IT service management suites including service desk, asset management, event management, problem management, change management, and incident management functions	ServiceNow, BMC Remedy/Helix, Atlassian (Jira/Confluence), ZenDesk, ManageEngine ServiceDeskPlus

Technology	Description	Examples*
Microsoft Windows Server	Administration and operational support for Windows servers including configuration, patching, upgrades, provisioning, troubleshooting	Microsoft Management Console, Windows Server Manager, Windows Admin Center, Azure Arc, WSUS, IBM BigFix
Network Hardware	Core networking functions, including routing, switching, security, WAN optimization, QoS, VoIP, traffic management, Wi-Fi, and Internet services	Cisco, Poly, F5, Juniper, HP
Office Productivity Suite	Installation, configuration, administration, and support of integrated multi-product user productivity suite	Microsoft 365 (Word, Excel, Outlook, PowerPoint), Edge, MS Teams, OneNote, OneDrive, etc. Google Office
Security Monitoring	Monitoring of network and/or system activities for malicious or unwanted behavior and blocking or filtering those activities. Includes log management, SIEM, data loss prevention, and DMZ / security perimeter	Cisco ASA Firewall, Snort, OSSEC, Prelude, Tripwire, AIDE, Samhain, Osiris, Cisco NIDS, Tipping Point, Sorcefire, CorreLog, LogLogic, LogRhythm, AlertLogic, Splunk, ArcSight, Imperva SecureSphere, Microsoft RMS, RSA DLP, Foundation Enterprise (McAfee), NESSUS, AppScan, Qualys, QRadar, Dynatrace, SolarWinds, Rapid7, ThousandEyes
Security Software and Hardware	Security software and hardware, including anti-virus, anti-malware, anti-spam, network access control, intrusion prevention, encryption software, and data loss prevention for endpoints, servers, email, and other network gateways	Symantec, Sophos, Trellix, Bluecoat, ForcePoint, Palo Alto, RSA, Zix, Tanium, Cisco ISE, Microsoft/Windows Defender
Server Virtualization	Virtualization products and services run multiple virtual machines on a single physical machine, sharing the resources of that single computer across multiple environments	Vmware ESX/ESXi, Microsoft Hyper-V, IBM Power VM, Azure Virtual Server, Amazon Virtual Private Server, IBM Power / PowerVM, Oracle OCI Compute VM, Oracle VirtualBox
Storage Management	Administration of digital content storage facilities including configuration, provisioning, allocation, virtualization, monitoring, and archival	IBM, Dell, File Server Resource Manager, Azure Storage Explorer, Amazon AWS Storage

Technology	Description	Examples*
System Scheduling	Management of automated job scheduling and calendars to control batch processing, report distribution, data archival, file transfers, and error handling	BMC Control Products Suite, SCLM, Dimensions, BMC Enterprise Manager, BMC Control-M, Dimensions, Advanced FTP, PeopleTools, CA JobTrac, Automic, Spring Batch, GoAnywhere, IBM BigFix
Telecomm	Voice communications technologies including PSTN, VoIP, PBX, phone sets, gateways, conference bridges, transcoding resources, and voicemail	CBTS, Cisco, Nortel, Centrex, Fujitsu, Mitel, NEC, Avaya
UNIX/Linux/AIX	Open system server operating environments used to host applications, databases, utilities, and services	Red Hat Linux, IBM AIX, Oracle Solaris, Micro Focus SUSE, HP-UX, OpenShift, Oracle Linux, CentOS Stream, Linux Mint, Ubuntu