

DATA SECURITY

IDENTITY MANAGEMENT

BUSINESS CONTROLS

Threat	Countermeasure	Products Recommended
Data threats		
Data.1.Connection	<ul style="list-style-type: none"> Use authentication and authorization best practices following the principle of least privilege 	DB2 or IDS
Data.2.BaseTables	<ul style="list-style-type: none"> Classify data and set privileges based on the principle of least privilege Assign privileges via roles and not directly to the users Ensure sensitive objects owned by roles Limit all access of these roles to users connecting via trusted contexts Audit all access to important tables Do not grant access to PUBLIC Use LBAC or MLS on sensitive tables in classified government environments 	DB2 or IDS IBM AME z/OS RACF
Data.3.OtherTables	<ul style="list-style-type: none"> Protect violation, exception and staging tables the same as base tables Do not grant direct access to MQTs 	DB2 or IDS
Data.4.CommonUserID	<ul style="list-style-type: none"> Use the Trusted Context feature in any N-tier environment 	DB2
Data.5.DBAAccess	<ul style="list-style-type: none"> Monitor: Audit all actions requiring DBA authority Restrict access to DBA Authority: Make DBA authority available only via a role and control access to this role using trusted context Prevent DBA from accessing data: Protect the data with LBAC or MLS 	DB2 or IDS IBM AME
Data.6.OSAdminAccess	<ul style="list-style-type: none"> Encrypt data at rest (AES recommended) Use extended operating system access control 	IBM DEE z/OS Encryption z/OS RACF
Data.7.InTransit	<ul style="list-style-type: none"> Encrypt data in motion (SSL recommended) 	DB2 or IDS z/OS AT-TLS
Data.8.Backups	<ul style="list-style-type: none"> Encrypt all backup images and archive images on any media type Implement access control and full auditing for any attempt to access the backup encryption keys 	IBM DEE IBM Optim Archive z/OS Tape Drive
Data.9.TxnLogs	<ul style="list-style-type: none"> Use extended operating system access control 	IBM DEE z/OS RACF
Data.10.ArchiveLogs	<ul style="list-style-type: none"> Encrypt data at rest (AES recommended) 	IBM DEE z/OS Tape Drive
Data.11.Diagnostics	<ul style="list-style-type: none"> Use extended operating system access control Audit any access to these files 	IBM DEE z/OS RACF
Data.12.Extract	<p>1. Test:</p> <ul style="list-style-type: none"> Use Optim TDM's data privacy capabilities to mask out all sensitive information <p>2. Distribution:</p> <ul style="list-style-type: none"> Encrypt data at rest (AES recommended) Audit all access to the extract file 	IBM Optim TDM IBM DEE z/OS Encryption
Threat Countermeasure Products Recommended		
Configuration threats		
Config.1.Files	<ul style="list-style-type: none"> Use extended operating system access control 	DB2 or IDS IBM DEE z/OS RACF
Config.2.DBCreate	<ul style="list-style-type: none"> Revoke this privilege except for authorized DBA Audit all create database attempts 	DB2 or IDS
Threat Countermeasure Products Recommended		
Audit threats		
Audit.1.Config	<ul style="list-style-type: none"> Use extended operating system access control 	DB2 or IDS IBM DEE z/OS RACF
Audit.2.Logs	<ul style="list-style-type: none"> Use a secure centralized audit repository Encrypt data at rest (AES recommended) 	DB2 or IDS IBM AME IBM DEE
Threat Countermeasure Products Recommended		
Executable threats		
Executable.1.Files	<ul style="list-style-type: none"> Use executable security, such as the "operational controls" 	IBM DEE z/OS RACF
Executable.2.Dirs	<ul style="list-style-type: none"> Use extended operating system access control on directories 	IBM DEE z/OS RACF

HOST SECURITY

NETWORK SECURITY

PHYSICAL SECURITY