



FortiDB™ Database Security and Compliance



Discovery and Vulnerability Management

Database and sensitive data discovery, vulnerability management



Database Activity Monitoring and Audit

Both for privileged users and application users



Policy-based Intrusion Protection

Flexible framework to stop malicious transactions



User Access Management

Privilege summary and change monitoring



Database Risk Management and Compliance

For risk mitigation and compliance

Automated Security and Compliance

The FortiDB family of appliances and software delivers a complete Database and Application security product line. It delivers centrally-managed security, audit policy compliance and vulnerability management (VM) for databases and applications across your extended enterprise. FortiDB enables you to meet the challenges of increasing access to your business-critical data in ERP, CRM, or SCM systems while decreasing the threat of data breach. Its sophisticated database activity monitoring (DAM), audit and advanced reporting automatically documents your policy compliance with internal policies as well as government or industry regulations such as PCI-DSS, SOX, Basel II, GLBA, and HIPAA.

Comprehensive Security and Compliance

- Identifies and reports on confidential data access; aids in PCI-DSS, SOX and other regulations
- Periodic scan of every database in your network
- Built-in policies for database transactions and regulations such as SOX, PCI
- Policy-based Intrusion Protection
- Flexible deployment and centralized web-based management
- Flexible audit data collection methods — native auditing, network sniffer or lightweight agents
- Independent and secure audit storage
- Comprehensive audit/compliance reports
- Tight integration with ArcSight SIEM



FortiCare

Worldwide 24x7 Support
support.fortinet.com



FortiGuard

Threat Research & Response
www.fortiguards.com

Comprehensive Monitoring and Protection

FortiDB enforces acceptable use policies and alerts on database security threats. It continuously monitors all access to personally identifiable data (PID), financial data and other sensitive data types residing in your databases. Additionally, there is an option to block suspicious transactions, utilizing the same policies which were configured for alerting. FortiDB's full-featured monitoring and auditing technology manages critical policy issues such as change control, internal controls, privileged user monitoring, and privacy protection as well. Its change control features keep track of all changes related to database structures and users. The user privilege change monitoring function provides data for user access management and integration.

Granular Discovery and Vulnerability Management

FortiDB provides Database and Sensitive Data Discovery functions. The Vulnerability Management function automatically detects new security weaknesses, policy noncompliance. FortiDB appliances and software ship with hundreds of preconfigured policies that address industry and governmental requirements, as well as security best practices. They include a comprehensive set of standards-based reports that provide specific, actionable information. The FortiGuard Global Threat Research Team provides dynamic policy and signature updates. This industry-leading research and remediation advice enables you to strengthen the integrity and security of your databases quickly and effectively.

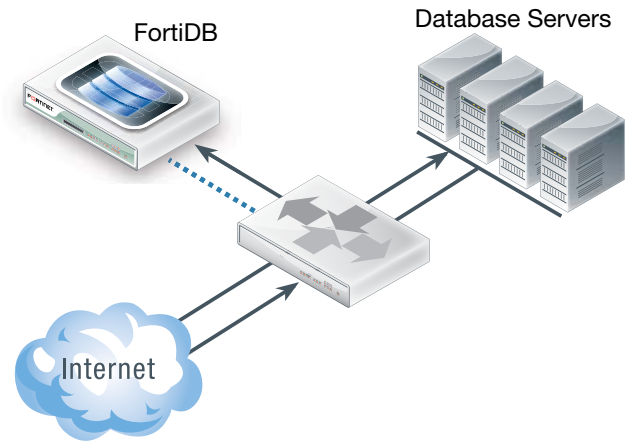
Accelerate Deployment and Lower Costs

Flexible data collection methods ensure easy deployments even in complex environments. Native audit provides completeness and accuracy of audit data for both host based and remote connections. There is an agent based and a sniffer based option for audit data collection which does not require the native audit to be turned on.

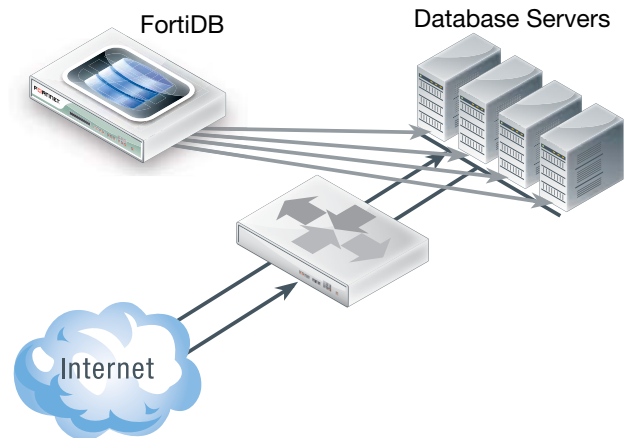
The other area which can significantly decrease the complexity of the deployments is the ease of configuration. Besides the hundreds of predefined policies, there is an automatic policy generation function in FortiDB which streamlines the entire configuration process. Ultimately the two factors described above translate into quick deployments and lower costs.

FortiDB Deployment Options

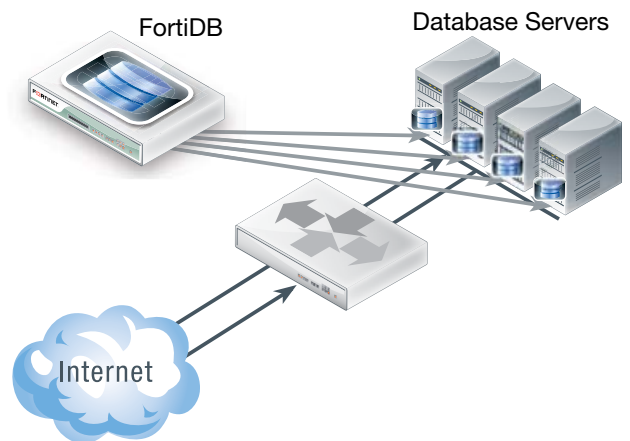
- Network Sniffer
 - No impact on the server
 - Zero network latency
 - Transparent to infrastructure



- Native Audit
 - Selective audit, only 3–4% performance impact
 - Does not require agents
 - Captures 100% of events



- Network Agents
 - 2–3% performance impact on the server (not the DB)
 - Agents send information back to FortiDB appliances



HIGHLIGHTS

Best-In-Class Discovery and Assessment

- **Data and Database Discovery**
Besides the basic database discovery, FortiDB can also discover sensitive data such as credit card numbers, Social Security numbers etc. The results can be used for configuring policies to monitor sensitive data access.
- **Vulnerability Management**
Out-of-the-box policies facilitate immediate results. The policies are updated by FortiGuard, and can also be customized. They contain mappings to PCI, CIS and CVE numbers. Remediation advice provides an easy way to manage vulnerabilities.
- **Privilege Review**
The results of the privilege review can be used to establish a more secure role and access right setting in the database.
- **Profiling**
This function creates a user behavior model at the database level, at the individual user or table level. The results can be used to configure policies more accurately to identify suspicious access patterns.

Streamlined Policy/Control Configuration

- **Automated Policy Generation**
FortiDB can generate User, Session or Table access policies based on transactional data collected over a period of time. These policies then can be applied across multiple databases through the enterprise.
- **Out-of-the-box DDL, DCL, SOX, PCI Policies**
Most policies such as Data Definition Language (DDL), Data Control Language (DCL) and Compliance (SOX, PCI) are out-of-the-box in FortiDB. This facilitates quick configuration and deployment.
- **Privileged User Monitoring Policies**
For privileged user monitoring/audit, there is a quick setup process where the available usernames will be presented directly from the database. Alternatively, the automated policy generation function can be used.
- **Sensitive Data Access Monitoring**
Similar to the privileged user monitoring, tables and columns for monitoring can also be selected directly from the database. It is also recommended to run the sensitive data discovery, so the results can be turned into policies for data access. Alternatively, the automated policy generation function can be used.
- **Activity Audit Policies**
Besides the security focused alert policies, audit policies can also be defined in FortiDB, with the main purpose of auditing specific users or objects

Flexible Monitoring/Audit and Protection Capabilities

- **Privileged User and Application User Monitoring**
FortiDB can monitor privileged and application users. Both users can be specified during the configuration process. In some cases, a short research is recommended to identify the specific attributes of the two user types.
- **Configurable Real-time Alerts/Full Event Details**
Real-time alerts contain all the attributes which can uniquely identify transactions/users.
- **Separation of Duties**
There is a built-in role-based access management system in FortiDB. It is augmented by an asset-based model, where FortiDB users can be associated with certain groups of databases.
- **Policy-based Intrusion Prevention**
FortiDB can be configured to block suspicious transactions, utilizing the same policies which were created for alerting.
- **User Access Management and Integration**
Access levels in the database can be monitored for changes utilizing the predefined DCL alert policy group. Based on the results, access levels and roles can be adjusted. This information can also be sent to other access management systems for integration.

Reporting and Compliance Automation

- **Automated Compliance Reports/Integrated Compliance Frameworks**
In addition to the predefined compliance policies, FortiDB also provides the corresponding predefined compliance reports for SOX and PCI. This makes the configuration process quick and efficient.
- **Reports with Detailed Drilldowns**
Reports contain detailed information for more detailed analysis.
- **Predefined and Custom Reports**
There are multiple predefined reports for Vulnerability Management, Database Activity Monitoring and Compliance. Additionally, there are custom reports to meet specific reporting requirements.
- **Integration with SIEM**
FortiDB supports SYSLOG format which is common for SEIM tools. Additionally, there is a specific integration package for ArcSight.

Flexible Deployment Options

- **Appliance and Software**
FortiDB can be deployed as an appliance or as software. This makes the deployment process easier, especially in larger enterprises and virtualized environments.
- **Multiple Data Collection Methods**
All mainstream data collection methods are supported in FortiDB. Different data collection methods can be used for different databases on the same appliance or on the same software/VM instance.

System

Administration

Target Database Server

Policy

Vulnerability Assessment

DB Activity Monitoring

Target DB Activity Profiling: oracle_t1g2_10.101.0.00

DB Login/User: SYSTEM (7) Source Applications: 1 Tables Accessed: 7

Source IP	DB Hostname	Source Application	DB User	Session Count
10.101.0.1	founder-328f01	SQL Developer	xiangfan	1

Displaying item 1 of 1.

Table Name	Select	Update	Insert	Delete	Create	Alter	Drop	Trunc	Grant	Revoke
oracle.SYSTEM.student	0	0	0	0	1	0	1	0	0	0
oracle.SYSTEM.v_st	0	0	0	0	1	1	1	0	0	0
oracle.scott.emp	0	0	0	0	0	0	0	0	1	1
oracle.SYSTEM.employee	0	0	0	0	1	0	1	0	0	0
oracle.SYSTEM.lab_test_d0_2	0	0	0	0	1	0	1	0	0	0
oracle.SYSTEM.department	0	0	0	0	1	0	1	0	0	0
oracle.SYSTEM.lab_test_d01	0	0	0	0	1	4	1	0	2	2

Displaying items 1 thru 7 of 7.

Refresh Back

Activity Profiling

FortiDB automatically generates user activity baselines for easy policy configuration.

System

Dashboard

Target Database Server

Target Database Server Defined: 9
 Database Server Define Complete: 9
 Database Server Define Incomplete: 0
 Database Server Group: 5
 License Limit of Database Server: 30

Policy

Total Policies (VA/DAM): 655/45
 VA Pre-Defined Policies: 651
 VA User-Defined Policies: 4
 Policy Groups(VA/DAM): 11/11
 Last VA Pre-Defined Policy Update: 06/30/11

Vulnerability Assessment

Assessment Defined: 7
 Currently Running: 0
 Scheduled: 0
 Assessment Run: 13
 Total Vulnerability Result: 196
 Vulnerabilities Found: 47
 Informational Result: 45
 Check Passed: 104

VA Vulnerabilities

By Severity: Critical: 16 (8.1%), Major: 19 (9.7%), Minor: 5 (2.6%), Controversy: 4 (2.0%)

By Classification: Post System: 2 (4.3%), DB Server: 14 (29.8%), Privilege: 7 (14.7%), Password: 18 (36.8%), Configuration: 14 (28.7%), Unclassified: 0 (0.0%)

DB Activity Monitoring

Target Allow Monitor: 9
 Currently Monitoring: 2
 Alerts Grouping: 10
 Grouping Scheduled: 0
 Total Alerts: 638744
 Today: 36099
 Recent 7 Days: 638744
 Recent 30 Days: 638744
 Recent 12 Months: 638744

Recent DAM Alerts

Week Month Year

Dashboard

The FortiDB dashboard displays essential Vulnerability Assessment and Database Activity Monitoring/Audit information.

System

Administration

Target Database Server

Policy

Vulnerability Assessment

DB Activity Monitoring

Alerts Summary

DB Activity Monitoring

Total Alerts: 640717
 Today: 38872
 Recent 7 Days: 640717
 Recent 30 Days: 640717
 Recent 90 Days: 640717
 Recent 12 Months: 640717

Target Allow Monitor: 9
 Currently Monitoring: 2
 Alerts Grouping: 10
 Grouping Scheduled: 0

Recent 7 Days:

Recent 30 Days:

Recent 90 Days:

Recent 12 Months:

By Severity:

Severity	Count
Informational	26205

By Policy:

Policy Name	Count
My Alert user Policy	12350
Export-userPolicy	10403
My Alert table Policy	810
My Alert table column Policy	810
My Alert session Policy	352
Tables	405
Table Privileges	270
Tablespaces	270
xfan.sessionPolicy	254
System Privileges	32
sessionPolicy1	32
4.2.1-userPolicy	10
Export-tablePolicy	4
4.2.1-sessionPolicy	2
Export-tableColumnPolicy	1

By Action:

DB Action	Count
SELECT	21663
INSERT	1082
LOGON	596

Alert Summary

High level overview of alerts and trends.

Alerts Analysis

Detailed trend analysis allows users to improve their internal control infrastructure.

FortiDB Software

Fortinet also gives you the ability to deploy FortiDB database security software on a range of software platforms. You can install FortiDB on Red Hat Linux, AIX, Solaris 10, Windows XP/Vista, Windows Server 2003, as well as virtualized environments. FortiDB software delivers the same centralized policy management for vulnerability management and database activity monitoring as FortiDB appliances.

Complete Security Solution

FortiDB is part of Fortinet's comprehensive portfolio of security gateways and complementary products that deliver a powerful blend of integrated multi-threat protection, ASIC-accelerated performance, and constantly updated, in-depth threat intelligence.

This unique combination delivers the highest level of network, content, and application security for organizations of all sizes, including managed service providers and telecommunications carriers. Fortinet's integrated approach improves your security posture while reducing your total cost of ownership and providing you with a flexible, scalable path for expansion.

The Fortinet portfolio includes:

- FortiGate® Network Security
- FortiAnalyzer™ Centralized Reporting
- FortiMail™ Messaging Security
- FortiManager™ Centralized Management
- FortiClient™ Endpoint Security
- FortiWeb™ Web Application Security
- FortiScan™ Vulnerability Management

SPECIFICATIONS

	FORTIDB-400C	FORTIDB-1000D	FORTIDB-3000D
Hardware			
Security Hardened Platform	Yes	Yes	Yes
Number of Licensed Database Instances	10	30	90
Total Interfaces	4x GbE	6x GE RJ45, 2x SFP	4x GbE, 2x GbE SFP
Number of Hard Drives	1	2x 2 TB	2
Total Hard Drive Capacity	1 TB	4 TB Raw, 2 TB RAID1	4 TB (2x 2 TB)
Storage Key (Boot Image)	2 GB Onboard Flash	2 GB	2 GB
Redundant Hot Swappable Power Supplies	No	Yes	Yes
Hardware Form Factor	Rack Mount (1 RU)	Rack mount, 2 RU	Rack Mount (2 RU)
Dimensions			
Height	1.7 in (4.4 cm)	3.5 in (8.8 cm)	3.4 in (8.7 cm)
Width	17.1 in (43.5 cm)	17.2 in (43.8cm)	20 in (48.2 cm)
Length	14.3 in (36.4 cm)	14.5 in (36.8 cm)	29.7 in (75.5 cm)
Weight	14.2 lbs (6.4 kg)	27.6 lbs (12.5 kg)	71.5 lbs (32.5 kg)
Environment			
AC Power Required	100–240 VAC, 50–60 Hz, 4.0 Amp (Max)	100–240 VAC, 50–60 Hz	100–240 VAC, 50–60 Hz, 10 Amp (Max)
Power Consumption (AVG)	181 W	115 W	317 W
Operating Temperature	32–104°F (0–40°C)	32–104°F (0–40°C)	50–95°F (10–35°C)
Storage Temperature	-31–158°F (-25–70°C)	-13–158°F (-25–70°C)	-40–149°F (-40–65°C)
Humidity	10–90% non-condensing	5–95% non-condensing	20–90% non-condensing
Compliance			
	FCC Class A Part 15, UL/CB/cUL , C-Tick, VCCI, CE	FCC Class A Part 15, UL/CB/cUL, C-Tick, VCCI, CE	FCC Class A Part 15, UL/CB/cUL, C-Tick, VCCI, CE, BSMI, KC, GOST
Supported Platforms			
Database	DB2 UDB V8 (NA only), DB2 UDB V9.x (NA only), DB2 UDB V9.1/V9.5/V9.7; MS SQL Server 2000/2005/2008/2008R2, MS SQL Server 2012; MySQL 5.1/5.5; Oracle 9i/10gR1/10gR2/11g; Sybase ASE 12.5 (sniffer only) 15.0.2/15.02/15.5/15.7 (MDA only)		
Repository Database	Apache Derby 10.x, Microsoft SQL Server 2005, Microsoft SQL Server 2008, Oracle 10gR2, Oracle 11g, PostgreSQL 8.3		
Browser	Internet Explorer 7,8,9; Firefox 3,4,5		

ORDER INFORMATION

Product	SKU	Description
FortiDB-400C	FDB-400C	FortiDB-400C, includes license for 10 database instances
	FC-10-D0400-135-02-DD	FortiDB Security Service (DBS)
FortiDB-1000D	FDB-1000D	FortiDB-1000D Database Security and Compliance Appliance, includes license for 30 database instances, 6x GE RJ45 ports, 2x SFP ports, 2x 2 TB storage
	FC-10-D1001-135-02-DD	FortiDB Security Service (DBS)
FortiDB-3000D	FDB-3000D	FortiDB-3000D, includes license for 90 database instances, 4x 10/100/1000 RJ45 ports, 2x GbE SFP ports, 2x 2 TB HDD storage
	FDB-3000D-BDL	Hardware plus 1 year 8x5 FortiCare and FortiGuard Bundle
	FC-10-D3000-274-01-12	1 Year Hardware Bundle Upgrade from 8x5 to 24x7 FortiCare Contract
	FC-10-D3000-902-02-DD	8x5 FortiCare plus FortiGuard Bundle Contract
	FC-10-D3000-957-02-DD	24x7 FortiCare plus FortiGuard Bundle Contract
	FC-10-D3000-135-02-DD	FortiDB Security Service (DBS)
	FC-10-D3000-311-02-DD	8x5 FortiCare Contract
	FC-10-D3000-247-02-DD	24x7 FortiCare Contract

FortiGuard® Security Subscription Services deliver dynamic, automated updates for Fortinet products. The Fortinet Global Security Research Team creates these updates to ensure up-to-date protection against sophisticated threats. Subscriptions include antivirus, intrusion prevention, web filtering, antispam, vulnerability management, application control, IP Reputation, Web Security and database security services signatures.

FortiCare™ Support Services provide global support for all Fortinet products and services. FortiCare support enables your Fortinet products to perform optimally. Support plans start with 8x5 Enhanced Support with “return and replace” hardware replacement or 24x7 Comprehensive Support with advanced replacement. Options include Premium Support, Premium RMA, and Professional Services. All hardware products include a 1-year limited hardware warranty and 90-day limited software warranty.

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