

# PIVOTAL® PRODUCT GUIDE

January 6, 2015  
VERSION 8

## I. Introduction

Pivotal Software is licensed by Pivotal to customers who order directly from Pivotal under a signature-bearing agreement that references this Product Guide or under the terms of an End-User License Agreement (“**EULA**”) between Pivotal and the individual or entity entitled to license the Software (individual or entities hereinafter referred to as “**Direct End-Users**”). Pivotal also provides Software to its authorized Distributors, organizations that resell the Software directly, or through additional tiers of resellers, to the individual or entity licensed to use of the Software (“**Indirect End-User**”). Whether Software is purchased under the EULA or other signed agreement, such applicable agreement is referred to as “EULA” herein. Such Direct End-Users and Indirect End-Users are referred to as “You” or “Customer” herein. The information in this Pivotal Product Guide (“**Product Guide**”) is provided to further define the license rights and limitations for the Software.

## II. Terms Applicable to All Products

The terms set forth in this Product Guide apply to any Pivotal Software licensed by Customers under a EULA.

The terms of this Product Guide shall supersede and control over any conflicting or additional terms and conditions of any license agreement, order document, acknowledgment or confirmation, or other document issued by Customers, unless Pivotal executes a separate written agreement with any such Customers expressly indicating that: (a) such document shall modify this Product Guide; or (b) the terms of such document shall supersede and control in the event of any inconsistency.

The Term shall be either on a (a) Subscription Services basis 1, 2 or 3-year Term; or (b) perpetual and must be specified in the applicable order, which means the applicable Pivotal or Distributor quote or Customer purchase order (“Order”).

## III. Pivotal Software Table

This table lists the applicable license metrics for the Software. These notes are for reference purposes only. Please refer to the Software product specific section of the Product Guide for more information.

SOFTWARE PRODUCT NAME	LICENSE METRIC/ UNIT OF MEASURE CODE
PIVOTAL® APP SUITE	Per Individual CPU Core (ZC)

PIVOTAL <sup>®</sup> APP SUITE APPLIANCE	Per Named User (UA)
PIVOTAL <sup>®</sup> BIG DATA SUITE	Per Individual CPU Core (ZC)
PIVOTAL CF <sup>®</sup> OPERATIONS MANAGER	Per Foundation (FA)
PIVOTAL CF <sup>®</sup> ELASTIC RUNTIME	Per Application Instance (FC)
JENKINS ENTERPRISE BY CLOUDBEES <sup>®</sup> FOR PIVOTAL CF <sup>®</sup>	<i>Determined by Cloudbees</i>
DATASTAX <sup>®</sup> ENTERPRISE FOR PIVOTAL CF <sup>®</sup>	<i>Determined by DataStax</i>
PIVOTAL <sup>®</sup> MOBILE SERVICES SUITE FOR PIVOTAL CF <sup>®</sup>	Per Application Instance (FC)
PIVOTAL RABBITMQ <sup>®</sup> FOR PIVOTAL CF <sup>®</sup>	Per CPU (ZA)
PIVOTAL TRACKER <sup>®</sup> FOR PIVOTAL CF <sup>®</sup>	Per Named User (UA)
PIVOTAL <sup>®</sup> COMMAND CENTER (PCC) FOR PIVOTAL <sup>®</sup> HD	Per Node (IA)
PIVOTAL GEMFIRE <sup>®</sup>	Per Individual CPU Core (ZC)
PIVOTAL GEMFIRE <sup>®</sup> XD	Per Individual CPU Core or Per Node (IA)
PIVOTAL GREENPLUM <sup>®</sup> COMMAND CENTER FOR GREENPLUM DATABASE	Per Node (IA)
PIVOTAL GREENPLUM <sup>®</sup> DATABASE	Per Terabyte (TB) (Ingested TB) (CA)
PIVOTAL <sup>®</sup> GPText	Per Terabyte (TB) (Ingested TB) (CA)
HAWQ <sup>®</sup>	Per Node (IA)
PIVOTAL <sup>®</sup> HD	Per Node

	(IA)
PIVOTAL RABBITMQ <sup>®</sup>	Per CPU (ZA)
PIVOTAL <sup>®</sup> RTI (REAL TIME INTELLIGENCE)	Per Individual CPU Core (ZC)
PIVOTAL <sup>®</sup> tc SERVER	Per CPU (ZA)
PIVOTAL <sup>®</sup> tc SERVER DEVELOPER EDITION	Per Named User (UA)
PIVOTAL <sup>®</sup> WEB SERVER	Per CPU (ZA)

#### IV. Definitions

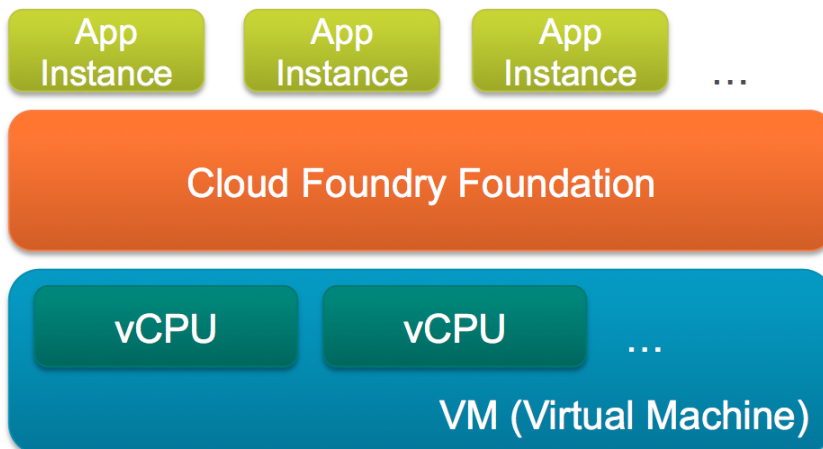
The definitions set forth below supplement definitions in the EULA. Capitalized terms not defined herein shall have the same meaning as defined in the EULA.

**Amazon<sup>®</sup> Machine Image (“AMI”):** An Amazon Machine Image is a virtual appliance used to instantiate (create) a VM within the Amazon Elastic Compute Cloud (“EC2”). It serves as the basic unit of deployment for services delivered using EC2.

**Application Instance (“AI”):** Application Instances are how Pivotal CF is sold. Pivotal CF AIs are configured to run on a certain number of vCPUs. AIs typically consume a fraction of a vCPU, and customers typically have many more AIs than vCPUs.

**Application Instance Licensing Model (or CF Elastic Runtime):** Licensing and pricing for Pivotal CF is based on the total number of AIs that a Customer simultaneously runs on the applicable Foundation. Each AI represents a single process running on a single VM within the Foundation.

**Multiple App  
Instances per CF  
Foundation**



**Multiple vCPUs  
per Virtual Machine**

**Core:** Single unit of processing power on a physical chip that houses a central processing unit that can execute computer programs.

#### **Core Equivalent:**

1. When operating the Software in a “bare metal” environment (which means (i) a physical machine without a hypervisor product capable of creating VMs or (ii) not within a cloud service environment), a “Core” is a single, computational unit of the Processor.
2. When operating the Software in a hypervisor (VM) environment, a “Core” is a single unit of virtual processing power (commonly referred to as a “vCPU”) configured to each VM.
3. When operating the Software in a public cloud services environment, a “Core” is the basic, most granular unit of computational power as defined by the cloud service provider. This may include, but is not limited to, such units expressed as the number of “vCPUs,” “virtual CPUs,” “virtual cores,” and “dynos.”

**ECU (or AWS EC2 Compute Unit):** Amount of processing power allocated to an AMI and defined in AMI settings (e.g., a 1 EC2 AMI). ECU provides the flexibility to choose instance types to meet your computing needs. ECU is displayed when picking an AMI. One ECU provides the equivalent CPU capacity of a 1.0-1.2 GHz 2007 Opteron or 2007 Xeon Processor.

The following table list the specifications for each Amazon EC2 Instance Type:

Instance Family	Instance Type	Processor Arch	vCPU	ECU	Memory (GiB)
General purpose	m1.small	32-bit or 64-bit	1 <sup>1</sup>	1	1.7
General purpose	m1.medium	32-bit or 64-bit	1	2	3.75
General purpose	m1.large	64-bit	2	4	7.5
General purpose	m1.xlarge	64-bit	4	8	15
General purpose	m3.xlarge	64-bit	4	13	15
General purpose	m3.2xlarge	64-bit	8	26	30

Source: <https://aws.amazon.com/ec2/instance-types/>

**Foundation:** A Foundation is a single running PIVOTAL CF OPERATIONS MANAGER hosted across a cluster of VMs. A typical enterprise deployment will contain multiple Foundations (e.g. development & testing, staging and production).

**Foundation Licensing Model:** Licensing and pricing are based upon the number of “Foundations” on which the AI will operate. A single “Foundation” includes use on up to all of the VMs running on physical servers at one physical location owned or operated by the Customer.

**Google® Compute Engine (GCE):** A service that provides VMs that run on Google infrastructure.

**Individual Central Processing Unit (“CPU”) Core Model:** Licensing and pricing is based upon the number of “Cores” on which the Software will operate. A “Core” is defined on the basis of the environment in which the Software operates.

**Logical Core:** The number of vCPUs the operating system recognizes (e.g., 1 vCPU with 4 cores and 2 threads per Core = 8 Logical Cores in the operating system.)

**Named User:** An individual user licensed to use the software for development purposes. It is not the number of end users that will use the application built by a Named User.

**Node:** Each motherboard on a laptop, desktop or server, except that a stand-alone 2U rack server consisting of two (2) or less motherboards is counted as a single node.

**Non-Production Environment:** A test environment, development environment, disaster recovery environment, high availability environment or other environment not used by end users for business or other operations. All programs used in the Non-Production Environment must be licensed under the appropriate EULA.

**Per Application Instance:** The total number of Application Instances used to run the Software.

**Per CPU:** The total number of physical Processors used to run the Software, limited to 6 Cores. Running the Software on a Processor with more than 6 Cores requires multiple Software licenses: 2 licenses for a Processor with up to 12 Cores, 3 licenses for a Processor with up to 18 cores, etc.

**Per Foundation:** The total number of Foundations used to run the Software.

**Per Individual CPU Core:** The total number of Core Equivalents used to run the Software.

**Per Logical Core:** The total number of Logical Cores is the number of vCPUs the operating system recognizes (e.g., 1 vCPU with 4 cores and 2 threads per Core = 8 Logical Cores in the operating system.)

**Per Managed Segment:** The worker servers for a given master server in a clustered data service (e.g. GPDB or HAWQ segments.)

**Per Named User:** The total number of Named Users that use the Software.

**Per Node:** The total number of Nodes used to run the Software.

**Per Terabytes (Ingested TB):** The amount of TBs that would be filled by all the data ingested by the Software.

**Per vCPU, core or ECU:** The total number of vCPUs, cores and/or ECUs used to run the Software.

**Processor:** A single, physical chip that houses a CPU that can execute computer programs.

**Production Deployment:** Software that is used to drive business workloads and not only used for Non-Production Environments.

**Production Environment:** The environment used by end users for business or other operations. All programs used in the Production Environment must be licensed under the appropriate license agreement.

**Server:** A hardware system capable of running the Software. A hardware partition or blade is considered a separate hardware system.

**Server Side:** Operations that are performed by the Server in a client-server relationship.

**SnS:** Support and Subscription Services.

**Terabyte (TB):** A measure of computer storage capacity that is 2 to the 40<sup>th</sup> power ( $2^{40}$  bytes) or approximately a trillion bytes.

**Term:** The period of time which You are licensed to use the Software (and/or the Subscription Services) as set forth in the quote, or order, and the Software will be available for Your use and/or access only for the duration of such Term.

**Unit of Measure:** When licensing the Software, an incremental license must be purchased for each Unit of Measure incurred.

**vCPU:** Single unit of virtual processing power configured to a VM.

**Virtual Machine (VM):** A software container that can run its own operating system and execute applications, just as a physical computer does.

**WAN Feature:** A specific feature found in PIVOTAL GEMFIRE and PIVOTAL GEMFIRE XD used to connect 2 separate clusters together and share data asynchronously.



## PIVOTAL PRODUCT TERMS

### PIVOTAL APP SUITE

**Description:** PIVOTAL APP SUITE provides the following middleware components: PIVOTAL tc SERVER, PIVOTAL RABBITMQ and PIVOTAL WEB SERVER.

**Per Individual CPU Core:** The total number of Core Equivalents used to run the Software.

**Pricing:** PIVOTAL APP SUITE is priced per Individual CPU Core. PIVOTAL tc SERVER, PIVOTAL RABBITMQ and PIVOTAL WEB SERVER can be run concurrently up to the licensed Unit of Measure for each individual product. Support for open source components is provided up to the licensed Unit of Measure for each supported product.

**Developer Use:** PIVOTAL APP SUITE can be used on single-node developer machines free of charge, without support.

**Developer Use Limits and Restrictions include:**

- Maximum 12-core machine
- Used only for software development purposes
- Used only by developers
- Not for testing, staging, production or hot standby

PIVOTAL APP SUITE Developer Support is available and sold through a separate SKU.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>. PIVOTAL APP SUITE Developer Support is also available as described here: <http://www.pivotal.io/support/oss>.

Support services are provided for the following open source components:

- Apache Tomcat
- Apache HTTP
- Spring, including Spring IO
- Groovy & Grails
- RabbitMQ
- Redis

### PIVOTAL APP SUITE APPLIANCE

**Description:** PIVOTAL APP SUITE APPLIANCE contains Pivotal's reference application, SpringTrader (written in Spring Java based on the traditional Nanotrader

reference Java application), in a VMware VM with supporting Pivotal Software. SpringTrader provides a reference application for developing, provisioning, and managing a distributed application in a cloud environment. The reference application and architecture provide a blueprint for development, infrastructure, and operations teams.

PIVOTAL APP SUITE APPLIANCE includes, but is not limited to, PIVOTAL tc SERVER, PIVOTAL RABBITMQ, PIVOTAL WEB SERVER, etc.

**Per Named User:** The total number of Named Users that use the software. OPTIONAL developer support sold per Named User.

**Pricing:** PIVOTAL APP SUITE APPLIANCE is free to use for development purposes only.

**Support Services:** Optional Developer Support is available as described here: <http://www.pivotal.io/support/oss>. Production support is not available for PIVOTAL APP SUITE APPLIANCE.

## PIVOTAL BIG DATA SUITE

**Description:** PIVOTAL BIG DATA SUITE enables your users, developers, and data scientists with a complete suite of data management tools.

PIVOTAL BIG DATA SUITE is a Subscription Service that includes PIVOTAL GREENPLUM DATABASE, PIVOTAL GEMFIRE, PIVOTAL GEMFIRE XD, PIVOTAL SQLFire, HAWQ and unlimited use of PIVOTAL HD.

**Per Individual CPU Core:** The total number of Core Equivalents used to run the Software.

**Pricing:** PIVOTAL BIG DATA SUITE is priced per Individual CPU Core. PIVOTAL GREENPLUM DATABASE, PIVOTAL GEMFIRE, PIVOTAL GEMFIRE XD, PIVOTAL SQLFire, HAWQ AND PIVOTAL HD can be run concurrently up to the licensed Unit of Measure for each individual product.

**Support Services:** Production support services and software maintenance are included in PIVOTAL BIG DATA SUITE. Support entitlements are described at <http://www.pivotal.io/support>.

## PIVOTAL CF OPERATIONS MANAGER

**Description:** PIVOTAL CF OPERATIONS MANAGER is a single running PIVOTAL CF instance hosted across a cluster of Virtual Machines. A typical enterprise deployment will contain multiple Foundations (e.g. development & testing, staging and production). PIVOTAL CF OPERATIONS MANAGER is licensed by Foundations.

**Foundation Licensing Model:** License and pricing is based upon the number of “Foundations” on which the AIs will operate. A single “Foundation” includes use on up to all of the VMs running on physical servers at 1 physical location owned or operated by You.

**Pricing:** PIVOTAL CF OPERATIONS MANAGER is priced on an annual subscription basis. PIVOTAL CF OPERATIONS MANAGER is purchased as a single unit/bundle and the optional add-on services can be purchased separately to provision on top of the Foundation.

A license of PIVOTAL CF OPERATIONS MANAGER includes the right to use the following PIVOTAL CF Services, **all of which are limited to a Non-Production Environment:**

- MONGODB® FOR PIVOTAL CF®
  - **Description:** Provides integration between PIVOTAL CF and MongoDB, an open-source document database.
- MYSQL® FOR PIVOTAL CF®
  - **Description:** Provides integration between PIVOTAL CF and MySQL, an open source database.
- NEO4J® FOR PIVOTAL CF®
  - **Description:** Provides integration between PIVOTAL CF and Neo4j, an open source graph database.
- REDIS FOR PIVOTAL CF®
  - **Description:** Provides integration between PIVOTAL CF and Redis, an open source data structure server.
- RIAK CS FOR PIVOTAL CF®
  - **Description:** Provides integration between PIVOTAL CF and Riak CS open source cloud storage.
- PIVOTAL HD FOR PIVOTAL CF®
  - **Description:** Delivers PIVOTAL HD - Pivotal's leading Hadoop distribution as a PIVOTAL CF Service. PIVOTAL HD is a commercially supported distribution of Apache Hadoop. PIVOTAL HD FOR PIVOTAL CF includes HDFS, YARN and MapReduce. It also includes HAWQ and PIVOTAL GEMFIRE XD.
- PIVOTAL RABBITMQ® FOR PIVOTAL CF®
  - **Description:** An add-on service to PIVOTAL CF. PIVOTAL CF

RABBITMQ increases application speed, scalability and reliability by delivering asynchronous messaging to applications. As a message broker for applications running on PIVOTAL CF, PIVOTAL RABBITMQ FOR PIVOTAL CF service applications can integrate with other PIVOTAL CF applications and with applications outside PIVOTAL CF using the service broker.

**Note:** PIVOTAL CF OPERATIONS MANAGER is sold in units of 1 and is a mandatory purchase for each one of the add-on services.

**Evaluation License:** Notwithstanding any term to the contrary in the applicable EULA, Your Evaluation Term for PIVOTAL CF OPERATIONS MANAGER shall be for 90 days in lieu of 60 days as set forth in Section 2.1 of the EULA or Evaluation order and solely in accordance with the use rights set forth in Section 2 of the EULA. A PIVOTAL CF OPERATIONS MANAGER evaluation license provides an available capacity of 1 PIVOTAL CF OPERATIONS MANAGER and 1 pack of PIVOTAL CF ELASTIC RUNTIME (50 application instances). The particular Evaluation Software, period of use, installation site and other transaction-specific conditions shall be as mutually agreed between Pivotal and You in an evaluation order.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

## PIVOTAL CF ELASTIC RUNTIME

**Description:** PIVOTAL CF ELASTIC RUNTIME is a Cloud Foundry runtime environment provisioned by PIVOTAL CF OPERATIONS MANAGER and is where AIs are hosted. Customers push applications and horizontally scale them to the requested number of AIs. A single user can have multiple applications and an application is often composed of many application instances. PIVOTAL CF ELASTIC RUNTIME is licensed by AI.

**AI Licensing Model (for CF Elastic Runtime):** Licensing and pricing is based on the total number of AIs that Customer simultaneously runs on the applicable Foundation.

**Pricing:** PIVOTAL CF ELASTIC RUNTIME is an add-on service to PIVOTAL CF OPERATIONS MANAGER and is sold in packs of 50 AIs measured at peaks across all Foundations (charged as the total number across all Foundations).

**Evaluation License:** Notwithstanding any term to the contrary in the applicable EULA or other signed written agreement, Your Evaluation Term for PIVOTAL CF ELASTIC RUNTIME shall be for 90 days in lieu of 60 days as set forth in Section 2.1 of the EULA. If you are licensing the PIVOTAL CF ELASTIC RUNTIME for evaluation purposes, you are only authorized to use the Software in a non-commercial, non-production

environment and only for a ninety (90) day period beginning on the day the Software is made available to you, unless otherwise agreed to by Pivotal. A PIVOTAL CF ELASTIC RUNTIME evaluation license provides an available capacity of 1 Foundation of PIVOTAL CF OPERATIONS MANAGER and 1 pack of PIVOTAL CF ELASTIC RUNTIME (50 application instances). The particular Evaluation Software, period of use, installation site and other transaction-specific conditions shall be as mutually agreed between Pivotal and Customer.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

## JENKINS ENTERPRISE BY CLOUDBEES FOR PIVOTAL CF

**Description:** JENKINS ENTERPRISE BY CLOUDBEES FOR PIVOTAL CF provides integration between PIVOTAL CF and a commercial version of open source Jenkins continuous integration platform provided by CloudBees.

**Prerequisites:** JENKINS ENTERPRISE BY CLOUDBEES FOR PIVOTAL CF requires PIVOTAL CF and the appropriate PIVOTAL CF OPERATIONS MANAGER and PIVOTAL CF ELASTIC RUNTIME licenses. Please refer to PIVOTAL CF OPERATIONS MANAGER and PIVOTAL CF ELASTIC RUNTIME licensing terms for further details.

**Licensing Model:** All PIVOTAL CF OPERATIONS MANAGER users are entitled to an evaluation license of JENKINS ENTERPRISE BY CLOUDBEES FOR PIVOTAL CF. Following the evaluation period set forth by CloudBees, a user will need to enter into a licensing agreement with CloudBees for continued use of JENKINS ENTERPRISE BY CLOUDBEES FOR PIVOTAL CF.

## DATASTAX ENTERPRISE FOR PIVOTAL CF

**Description:** DATASTAX ENTERPRISE FOR PIVOTAL CF provides integration between PIVOTAL CF and a commercial version of open source Cassandra distributed database management system provided by DataStax.

**Prerequisites:** DATASTAX ENTERPRISE FOR PIVOTAL CF requires PIVOTAL CF and the appropriate PIVOTAL CF OPERATIONS MANAGER and PIVOTAL CF ELASTIC RUNTIME licenses. Please refer to PIVOTAL CF OPERATIONS MANAGER and PIVOTAL CF ELASTIC RUNTIME licensing terms for further details.

**Licensing Model:** All PIVOTAL CF OPERATIONS MANAGER users are entitled to a non-production use license of DATASTAX ENTERPRISE FOR PIVOTAL CF. The user will need to enter into a licensing agreement with DataStax for production use of

DATASTAX ENTERPRISE FOR PIVOTAL CF.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

## PIVOTAL MOBILE SERVICES SUITE FOR PIVOTAL CF

**Description:** PIVOTAL MOBILE SERVICES SUITE FOR PIVOTAL CF provides a powerful set of consumer-grade, mobile backend services that accelerate your mobile app development and deployment. It supports native, hybrid and web applications and includes the following services: Push Notifications, Data Sync and API Gateway.

(1) **Push Notifications:** This service provides secure and scalable push notifications to your mobile apps, increasing user engagement and productivity.

(2) **Data Sync:** This service provides a backend data store with mobile-optimized content and access for your mobile apps.

(3) **API Gateway:** This service provides API aggregation and transformation, simplifying backend system integration and optimizing mobile content.

**Prerequisites:** PIVOTAL MOBILE SERVICES SUITE FOR PIVOTAL CF requires the appropriate PIVOTAL CF OPERATIONS MANAGER licenses. However, PIVOTAL CF ELASTIC RUNTIME is included PIVOTAL MOBILE SERVICES SUITE FOR PIVOTAL CF licenses, restricted for use with PIVOTAL MOBILE SERVICES SUITE FOR PIVOTAL CF. Please refer to PIVOTAL CF OPERATIONS MANAGER licensing terms for further details.

**Per Application Instance:** The total number of AIs used to run the Software.

**Licensing and Pricing:** License and pricing of PIVOTAL MOBILE SERVICES SUITE FOR PIVOTAL CF is based upon the total number of AIs that a Customer simultaneously runs on the PIVOTAL CF OPERATIONS MANAGER. PIVOTAL MOBILE SERVICES SUITE FOR PIVOTAL CF AIs do not count towards a Customer's existing PIVOTAL CF ELASTIC RUNTIME license. It is also licensed and priced on an annual subscription basis.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

### PIVOTAL RABBITMQ FOR PIVOTAL CF

**Description:** PIVOTAL RABBITMQ FOR PIVOTAL CF is an add-on service to PIVOTAL CF. PIVOTAL CF RABBITMQ increases application speed, scalability and reliability by delivering asynchronous messaging to applications. As a message broker for applications running on PIVOTAL CF, PIVOTAL RABBITMQ FOR PIVOTAL CF service applications can integrate with other PIVOTAL CF applications and with applications outside PIVOTAL CF using the service broker.

**Per CPU:** Physical Processor, limited up to 6 cores.

**Deployment:** PIVOTAL CF RABBITMQ is deployed on a cluster of VMs provisioned by the PIVOTAL CF OPERATIONS MANAGER.

**Prerequisites:** PIVOTAL RABBITMQ FOR PIVOTAL CF requires PIVOTAL CF and the appropriate PIVOTAL CF OPERATIONS MANAGER and PIVOTAL CF ELASTIC RUNTIME licenses. Please refer to PIVOTAL CF OPERATIONS MANAGER and PIVOTAL CF ELASTIC RUNTIME licensing terms for further details.

**Licensing Model:** All PIVOTAL CF OPERATIONS MANAGER users are entitled to a license of PIVOTAL RABBITMQ FOR PIVOTAL CF, restricted to Non-Production Environment use only. In order to use PIVOTAL RABBITMQ FOR PIVOTAL CF for production, customers need to purchase appropriate licenses of PIVOTAL APP SUITE.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

### PIVOTAL TRACKER FOR PIVOTAL CF

**Description:** PIVOTAL TRACKER FOR PIVOTAL CF is an agile project management and collaboration tool for enterprise clouds that integrates with PIVOTAL CF.

**Inclusions:** MYSQL for PIVOTAL CF and RIAK CS for PIVOTAL CF (restricted for use with PIVOTAL TRACKER for PIVOTAL CF).

**Prerequisites:** PIVOTAL TRACKER FOR PIVOTAL CF requires PIVOTAL CF and the appropriate PIVOTAL CF OPERATIONS MANAGER license. Please refer to PIVOTAL CF OPERATIONS MANAGER licensing terms for further details.

**Licensing Model:** PIVOTAL TRACKER FOR PIVOTAL CF is licensed on a per named user basis.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.



## PIVOTAL COMMAND CENTER (PCC) FOR PIVOTAL HD

**Description:** PIVOTAL COMMAND CENTER FOR PIVOTAL HD is a web-based interface for deploying, monitoring and managing PIVOTAL HD environments. With PIVOTAL COMMAND CENTER FOR PIVOTAL HD, your system administrators can determine if the PIVOTAL HD cluster is running efficiently. If it is not, they can easily and efficiently diagnose functional or performance issues or perform required cluster management tasks.

**Per Node:** The total number of Nodes used to run the Software.

**Note:** PIVOTAL COMMAND CENTER FOR PIVOTAL HD can work from one server against multiple PIVOTAL HD/HAWQ clusters of servers.

**Pricing:** PIVOTAL COMMAND CENTER FOR PIVOTAL HD is provided free of charge with PIVOTAL HD.

**Support:** Support entitlements are described at <http://www.pivotal.io/support>.

## PIVOTAL GEMFIRE

**Description:** PIVOTAL GEMFIRE is a distributed in-memory data grid for online transaction processing (“**OLTP**”) applications.

**Per Individual CPU Core:** The total number of Core Equivalents used to run the Software.

### PRICING:

**Enterprise Edition:** Production license for full GemFire functionalities, including WAN usage. GemFire Enterprise Edition includes all server side product features.

**Pricing:** Priced per vCPU, 1Core or ECU

### Community Edition:

- Limited to 3 processes, limited to 32GB per process, maximum 12 individual CPU Cores
- No WAN Feature usage allowed.
- The Community Edition can be deployed in production on payment of appropriate Support Services fees described below.

**Pricing:** Priced on a Subscription basis per year for Production Deployment.

### Pre-Production Testing & Development:

- Cannot be used for Production Deployment



- No WAN Feature usage allowed

**Pricing:** License -- 50% Discount from Enterprise Edition price, SnS to be paid on full Enterprise Edition license price.

### **Client /Embedded (individual & unlimited)**

#### **Pricing:**

- **Individual Licenses:** Priced per individual CPU Core on node running the client
- **Unlimited Upgrade:**
  - No limit to the number of clients connecting to the particular PIVOTAL GEMFIRE cluster
  - Priced per PIVOTAL GEMFIRE Enterprise Edition individual CPU Core and is applied to all Server Side individual CPU Cores in the cluster.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

## **PIVOTAL GEMFIRE XD**

**Description:** PIVOTAL GEMFIRE XD is an in-memory distributed OLTP SQL database delivering dynamic scalability and high performance for data-intensive applications and uses HDFS as the persistence layer for the data.

**Per Node:** The total number of Individual CPU Cores or Nodes used to run the Software.

**Pricing:** PIVOTAL GEMFIRE XD is licensed and priced per node. It is sold with/for the appropriate PIVOTAL HD version (i.e. PIVOTAL HD 2.0 with GEMFIRE XD 1.0) optionally as an add-on.

**Evaluation Software:** Notwithstanding any term to the contrary in the applicable EULA, PIVOTAL GEMFIRE XD Evaluation Software shall be used solely in accordance with the use rights set forth in Section 2 of the EULA. PIVOTAL GEMFIRE XD Evaluation Software shall not be used with more than 50 nodes when deployed with PIVOTAL HD. The particular Evaluation Software, period of use, installation site and other transaction-specific conditions shall be as mutually agreed between Pivotal and You in an evaluation order.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

### PIVOTAL GREENPLUM COMMAND CENTER (GPCC) FOR GREENPLUM DATABASE

**Description:** PIVOTAL GREENPLUM COMMAND CENTER is a web-based interface for deploying, monitoring and managing PIVOTAL GREENPLUM DATABASE environments.

**Per Node:** The total number of Nodes used to run the Software.

**Note:** GPCC works from 1 server configured with every PIVOTAL GREENPLUM DATABASE master server.

**Pricing:** GPCC is provided free of charge with PIVOTAL GREENPLUM DATABASE.

**Support:** Support entitlements are described at <http://www.pivotal.io/support>.

### PIVOTAL GREENPLUM DATABASE (GPDB)

**Description:** PIVOTAL GREENPLUM DATABASE (GPDB) is an extensible relational database platform that uses a shared-nothing, massively parallel processing (MPP) architecture built atop commodity hardware to vastly accelerate your analytical processing. GPDB's shared-nothing MPP architecture provides every segment with an independent high-bandwidth connection to dedicated storage.

**Per Terabytes (TB) (Ingested TB):** The amount of TBs that would be filled by uncompressing all the data contained in all tables in a GPDB system. This includes any table generated by in-DB transformations and includes the data contained in the indices.

**Pricing:** PIVOTAL GPDB is priced per TB, and the customer may select the number of TBs in the corresponding tier.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

### PIVOTAL GPText

**Description:** PIVOTAL GPText is a no-cost add-on to PIVOTAL GPDB. Using PIVOTAL GPText, Your organization can quickly and easily set up text feature extraction which, when combined with PIVOTAL GREENPLUM DATABASE's deep analytic support, enables users to quickly ask analytic questions they simply could not ask before at scale. PIVOTAL GPText joins the PIVOTAL GREENPLUM DATABASE MPP database server with Apache Solr enterprise search and the MADlib analytics library to provide large-scale analytics processing of semi-structured and structured data and business-decision

support. PIVOTAL GPText includes free text search and support for text analysis.

**Unified Query Parser: PIVOTAL** GPText is designed to support all three query parsers as one parser – Lucern or basic searches with Boolean clauses; surround query to identify word proximity and association; and complex to allow for wildcard and regular expression searches to enable complex pattern matching. For extremely complex phrases, You can combine all three types into one search query.

**Analytics Extensibility: PIVOTAL** GPText can be paired with the MADlib analytics library and it can perform complex analytics on datasets, including clustering, classification, topic modeling, and sentiment analysis, and more.

**Per Terabytes (TB) (Ingested TB):** The amount of TBs that would be filled by all the data ingested by PIVOTAL GPDB.

**Prerequisites:** (1) PIVOTAL GREENPLUM DATABASE 4.2.X installed; (2) At least 2 GB RAM available on each segment host; (3) JRE 1.6.X in your Java path; (4) Optional: MADlib -- for advanced analytics capabilities.

**Pricing:** PIVOTAL GPText is a no-cost add-on to PIVOTAL GPDB.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

## HAWQ

**Description:** HAWQ integrates the industry’s first native, MPP SQL query Processor with Apache Hadoop. HAWQ enables You to leverage existing SQL-capable business intelligence and analytic tools and extract, load, transform (ETL) processes, plus Your workforce’s SQL skills to simplify Hadoop-based data analytics development, thereby increasing productivity. HAWQ benefits include unprecedented query processing performance -- 100X improvement in query performance -- as well as true, interactive and deep SQL processing, and powerful analytics.

**Pivotal Xtension Framework (PXF):** PXF is an external table interface in HAWQ that allows you to read data stored within the Hadoop ecosystem. External tables can be used to load data into HAWQ from Hadoop and/or also query Hadoop data without materializing it into HAWQ. It enables loading and querying of data stored in Hadoop Distributed File System (HDFS), HBase and Hive and supports a wide range of data formats such as Text, AVRO, Hive, Sequence, RCFile formats and HBase. PXF can be used to conduct statistical and analytical functions from HAWQ (e.g. MADlib) on HBase or Hive data, joining in-database dimensions with HBase facts, leveraging analytical capabilities on Hadoop data files of various kinds, and fast ingest of data into HAWQ for in-database processing and analytics. PXF provides parallel-data collaboration between

HAWQ, PIVOTAL HD and Hadoop data-processing modules creating a fully single and fast analytic workflow.

**Per Node:** The total number of Nodes used to run the Software.

**Pricing:** HAWQ is generally priced per node. HAWQ requires a matched version of PIVOTAL HD (i.e. PIVOTAL HD 1.1 with HAWQ 1.1.3), sold optionally. Under the subscription pricing module, HAWQ is priced per node annually. Under the perpetual pricing module, HAWQ is priced per node perpetual.

**Evaluation Software:** Notwithstanding any term to the contrary in the applicable EULA, a HAWQ Evaluation License shall be used solely in accordance with the use rights set forth in Section 2 of the EULA. HAWQ Evaluation Software shall not be used with more than fifty (50) nodes. The particular Evaluation Software, period of use, installation site and other transaction-specific conditions shall be as mutually agreed between Pivotal and You in an evaluation order.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

## PIVOTAL HD

**Description:** PIVOTAL HD is a 100% Apache-compatible Hadoop distribution featuring a compliant query engine for processing data stored in Hadoop. PIVOTAL HD includes Hadoop Distributed File System (HDFS), MapReduce, Hive, Pig, HBase, Zookeeper, and Yarn, amongst other components. A complete list of all the components included in PIVOTAL HD can be found at the following link: <http://docs.pivotal.io/pivotalhd/OverviewofApacheStackandPivotalComponents.html>.

**Per Node:** The total number of Nodes used to run the Software.

**Pricing:** PIVOTAL HD is generally priced per node annually, subject to Subscription Services or perpetual licensing pricing models.

**Evaluation License:** Notwithstanding any term to the contrary in the applicable EULA or other signed written agreement, Your Evaluation Term for PIVOTAL HD shall be for an unlimited timeframe in lieu of 60 days as set forth in Section 2.1 of the EULA. A PIVOTAL HD Evaluation License shall not be used with more than fifty (50) nodes. A PIVOTAL HD Single Node (VM) Evaluation License shall not be used with more than 1 single node VM.

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

### PIVOTAL RABBITMQ

**Description:** PIVOTAL RABBITMQ is a messaging broker. It gives your applications a common platform to send and receive messages, and your messages a place to live until received. PIVOTAL RABBITMQ may be deployed on physical, virtual or cloud infrastructure.

**Per CPU:** Physical Processor, limited to 6 cores.

**Pricing:** PIVOTAL RABBITMQ is priced per CPU (max 6 cores).

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

### PIVOTAL RTI (REAL TIME INTELLIGENCE)

**Description:** PIVOTAL RTI (REAL-TIME INTELLIGENCE) delivers fast, accurate and granular customer insights from network and user data streams. This innovative and open platform provides the flexibility to rapidly consume additional data streams, perform new analysis and generate insights from the source streams in real-time. The "scale-out" platform meets cost and performance objectives of operators looking for a fast, responsive approach to customer experience management, network performance optimization and real-time location based service delivery.

**Per Individual CPU Core:** The total number of Core Equivalents used to run the Software.

**Pricing:** PIVOTAL RTI is priced per Individual CPU Core.

**Support Services:** Support entitlements are described at [www.pivotal.io/support](http://www.pivotal.io/support).

### PIVOTAL tc SERVER

**Description:** PIVOTAL tc SERVER is an Apache Tomcat-compatible servlet and JSP container. A Tomcat-based Java application server, enterprises use PIVOTAL tc SERVER as a platform for running production java applications. PIVOTAL tc SERVER contains a 100% Apache Tomcat core with a set of optional extensions that facilitate deployment and maintenance in the enterprise. PIVOTAL tc SERVER can be deployed on physical, virtual, and cloud infrastructures.

**Per CPU:** Physical Processor, limited up to 6 cores.

**Pricing:** PIVOTAL tc SERVER is priced per CPU (max 6 cores).

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.

## PIVOTAL tc SERVER DEVELOPER EDITION

**Description:** PIVOTAL tc SERVER DEVELOPER EDITION is the developer edition of Apache Tomcat-compatible servlet and JSP container that includes Spring Insight. It is a Tomcat-based Java application server. Developers use PIVOTAL tc SERVER DEVELOPER EDITION as a platform for development and tuning of Java applications. The included Spring Insight application provides developers with enhanced performance visibility and enables tuning of Java applications that use the Spring Framework.

**Per Named User:** The total number of Named Users that use the Software. Optional developer support sold per Named User.

**Pricing:** PIVOTAL tc SERVER DEVELOPER EDITION is free to use for development only.

**Developer Use:** PIVOTAL tc SERVER DEVELOPER EDITION can be used on single-node developer machines free of charge, without support.

**Developer Use Limits and Restrictions Include:**

- Maximum 12-core machine
- Used only for software development purposes
- Used only for developers
- Not for testing, staging, production or hot standby

**Support Services:** Optional Developer Support for PIVOTAL tc SERVER DEVELOPER EDITION is available via PIVOTAL APP SUITE Developer Support, sold through a separate SKU.

## PIVOTAL WEB SERVER

**Description:** PIVOTAL WEB SERVER is based on the Apache HTTP web server, providing a familiar foundation for your web tier. PIVOTAL WEB SERVER contains complete Apache HTTP Server functionality with a set of optional extensions that facilitate deployment, security, and maintenance in the enterprise. PIVOTAL WEB SERVER can be deployed on a physical, virtual and cloud infrastructure.

**Per CPU:** Physical Processor, limited up to 6 cores.

**Pricing:** PIVOTAL WEB SERVER is priced per CPU (max 6 cores).

**Support Services:** Support entitlements are described at <http://www.pivotal.io/support>.