Bring advanced analytics to your data

Data science with Microsoft R Server

What?

Advanced analytics with Enterprise grade R wherever your data is- on-prem, cloud and hybrid.

Why?

With the combined power of Microsoft and R, you can build intelligent applications that will help you discover insights, predict results and make decisions to accelerate the pace of your business.

For more information:

https://www.microsoft.com/R-Server

Build intelligent applications to accelerate the speed of your business with R and Microsoft.

Advanced analytics with R

Data is the currency of modern business. From the cloud to on-premises and everything in-between, access to data anytime, anywhere from varied sources has become a requirement to be able to successfully operate and grow. With R, you can now go beyond reacting to data after the fact; instead, begin gathering proactive insights and predicting results, to help you plan ahead.

What is R?

A language: R is the lingua franca of analytics and platform for building statistical computing and graphical data models.

A community: R is a community of millions of users developing statistical and machine learning models and applications.

An ecosystem: R is an ecosystem with more than 7000 algorithm packages, test data, and model evaluations applicable to modern big data needs.

Microsoft and R

Microsoft offers several deployment options to bring next-generation advanced analytics to your business. Microsoft R Server is now available for Red Hat and SuSE Linux, Hadoop and Teradata environments as well as Windows through R Services in SQL Server 2016.

Microsoft R Server delivers R-based analytics to where your data lives. Processing analytics in-place eliminates data movement reducing latencies and operational costs. Microsoft R Server scales R analytics to Big Data sizes with parallelized algorthms and distributed processing; delivering world-class performance with unmatched flexibility.

Microsoft R Server

Microsoft R Server is a cost-effective advanced analytics platform. Enterprise-ready for comprehensive data science and analytics, Microsoft R Server scales and accelerates R, speeding up your time to value. R unlocks insights from data stored in workstations, databases, data warehouses, and Hadoop clusters, to help you quickly gain better insights.

Microsoft and open source

R is an open source, statistical programming language. It's a great tool to start building intelligent applications and realizing value in predictive analytics. While powerful, R is single threaded and memory bound. In order to handle Big Data, you need more.

Microsoft takes your R development and deployment to the next level with Microsoft R Server. With ease of integration, freedom to scale to data of any size, and speeds up to one hundred times faster than open source R, Microsoft R Server is the enterprise grade R for advanced analytics.
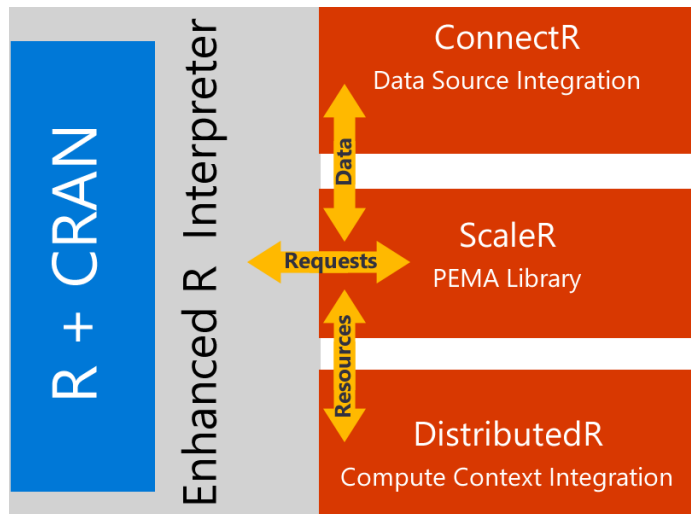
Analytics Servers for Everyone

Developers, experienced and novice, can now start developing R applications with the full power of Microsoft R Server, for free, using Microsoft R Server Developer Edition.

For data scientists and IT professionals that need to deploy Big Data analytic solutions in production, Microsoft R Server is available through standard Microsoft licensing channels for a variety of platforms and versions including Hadoop, Linux and Teradata. In addition, R Server capabilities for Windows are available through R Services in SQL Server 2016.

Available in these Platforms	
R Server for Red Hat Linux	64-Bit Red Hat Enterprise Linux (or CentOS) 5.x or 6.x
R Server for SUSE Linux	64-Bit SUSE Linux Enterprise Server 11 SP2 or SP3.
R Server for Hadoop on Red Hat	**Hadoop Distributions / Operating Systems:** Cloudera CDH 5.0-5.4 on RHEL 6.x Hortonworks HDP 2.0-2.3 on RHEL 6.x MapR M3/5/7 3.x, 4.0-4.1 on RHEL 6.x
R Server for Teradata DB	Teradata Database 14.10, 15.00, 15.10 on SLES 10.x or 11.x

Built to Scale

R + CRAN — Enhanced R Interpreter

ConnectR — Data Source Integration

Data

Requests

Resources

ScaleR — PEMA Library

DistributedR — Compute Context Integration

ScaleR: ScaleR provides algorithms optimized for parallel execution on Big Data. These workhorse algorithms are optimized for transparent distributed execution, eliminate memory limitations and scale from laptops to servers to large clustered systems.

DistributedR: Adaptable parallel execution framework providing services including communications, storage integration and memory management to enable ScaleR algorithms to analyze vast data sets and scale from single-processor workstations to clustered systems with hundreds of servers.

ConnectR: Versatile access to any data source ranging from simple workstation file systems to complex distributed file systems and MPP databases.