

SystemREDD™

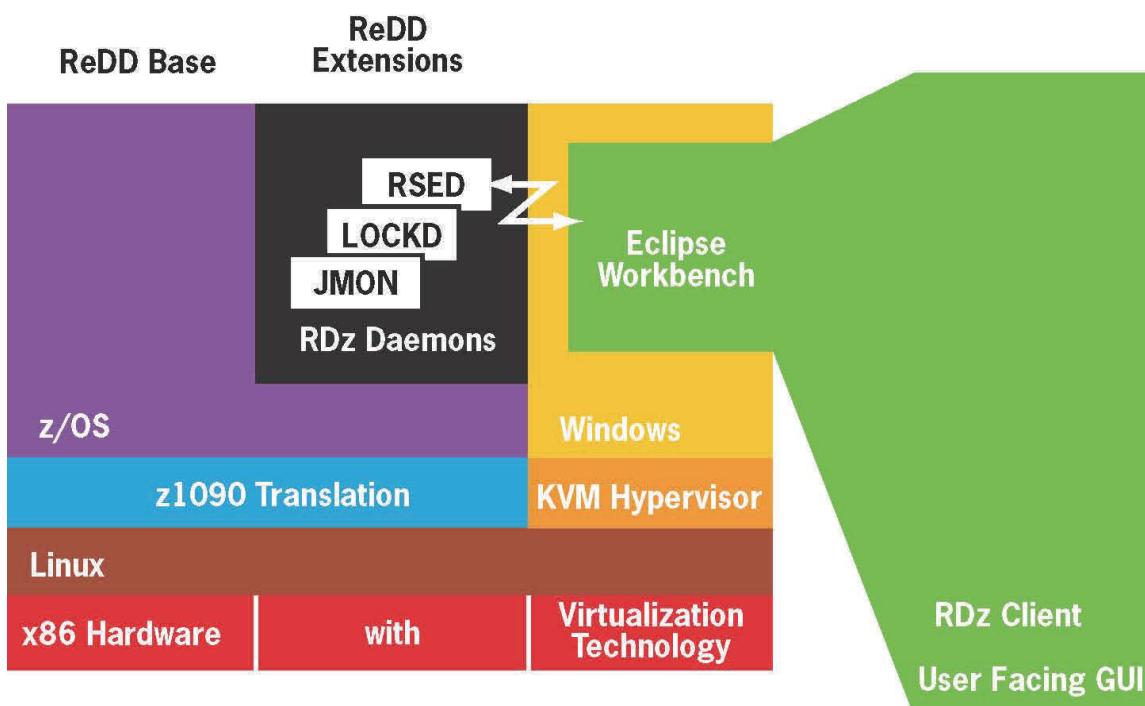
Rational Enhanced Development Device

Go beyond.

Information Technology Company

Information Technology Company (ITC)’s Rational® Enhanced Development Device (ReDD™) is a complete, ready-to-use mainframe application development system for IBM® Rational System z® customers. System ReDD™ offers a robust, reliable, value-priced solution to meet today’s requirements for IBM System z mainframe application development.

ReDD incorporates the Rational Development and Test Environment (RD&T) for System z with state-of-the-art Intel® 64-bit IBM and Lenovo®



Unleash the power of z

RD&T provides IBM Rational developers with a modern, agile unit test environment on a true mainframe platform. The system enables developers to build and test System z applications without impacting the production operations of an organization. The z/OS and middleware deployed on the RD&T requires less retesting and rework when moving applications from the unit test environment to the mainframe.

In addition, the RD&T environment provides isolation when testing application changes which can then be merged to the next level of testing using tools such as IBM Rational Team Concert™ for System z (RTCz).

The RD&T feature helps:

- Create, build and test new IBM System z applications anytime on the RD&T system before releasing to a mainframe
- Extend a z/OS test environment to a wider range of mainframe developers and testers
- Provides a modern, powerful and flexible team workbench to accelerate delivery of new workloads spanning multiple platforms
- Free-up expensive mainframe development MIPS for production capacity
- Simplify integration with other Rational and IBM tools for additional productivity and cost savings
- Improve application quality
- Lower your mainframe development costs

The RD&T release comes with System z compatibility including:

- z196 Architecture compatibility
- z196 Crypto – Crypto Express® Compatible (CEX3C)
 - ◆ DES (56-bit, 112-bit, and 168 bit)
 - ◆ AES (128-bit, 192-bit, and 256-bit)
 - ◆ ECC (Brainpool p-160 to p-512 and Prime p192 to 521)
 - ◆ RSA (up to 4096 bits in length)
- Supported key management algorithms
 - ◆ RSA (up to 4096 bits in length)
 - ◆ Diffe-Hellman (up to 2048 bits in length)
 - ◆ DES (112-bit)
 - ◆ AES (up to 256-bit, using AESKW)

The RD&T environment comes packaged with a preconfigured set of IBM software including:

- z/OS V1.12 and V1.13, including subfeatures
- WebSphere Application Server for z/OS V7.0, and V8.0
- CICS Transaction Server (CICS TS) V3.2, V4.1, and V4.2
- IMS V11.1
- IBM DB2 for z/OS V9.1 and V10.1
- IBM WebSphere MQ for z/OS V7.0
- IBM Java SDK for z/OS V5.0 and V6.0
- Enterprise COBOL V4.2
- Enterprise PL/I V4.1
- XL C++ V1.12 and V1.13
- Rational COBOL Runtime V6.0 (EGL)
- IBM Debug Tool V11.1

RD&T provides a simplified package from what was available previously with Rational Developer for System z Unit Test (RDz UT). Authorized Users or Floating Users licenses are available for configuration in either desktop or server environment. RD&T will support up to a 4-CPU system, providing 3 CPUs for the product and 1 CPU dedicated to run the underlying Linux operating system. This provides a platform with the provided middleware to facilitate an individual or small team configuration.

Additional Software Products

Rational Development and Test Environment for System z will support many programs written by IBM and IBM ISVs specifically for System z including IBM Rational Developer for System z (RDz).

RDz enables users to design and build traditional mainframe applications, web applications, and integrated service oriented architecture (SOA)-based composites quickly and efficiently. RDz uses industry standards to simplify the development of rich client interfaces, web user interfaces, traditional terminal interfaces, and back-end business logic deployable to CICS®, IMS™, DB2®, Batch, z/OS UNIX®, and WebSphere® transactional environments.

RDz Product Editions include the following:

- **Rational Developer for System z with EGL**
Provides System z developers with tools for building traditional and composite applications in an SOA and Web 2.0 environment
- **Rational Developer for System z with Java®**
Provides a unified development tool for enterprise applications running across System z in environments such as CICS, IMS, DB2, WAS, Compute Grid, and Batch
- **Rational Developer for zEnterprise™**
Provides a unified tool for heterogeneous application development spanning systems such as z/OS, CICS,



System ReDD Summary Table

SystemREDD – A Complete Application Development & Testing System	Included
IBM-approved Base Hardware System (x86) - Single (laptop) or Multiple User (server) Systems available	✓
IBM 1091 USB Hardware Key	✓
IBM 1091 Software Code	✓
Preloaded Linux Operating System with fixes and drivers as required	✓
Preloaded IBM 1091 Software Code	✓
Preloaded System z (RD&T) z/OS & Middleware Software (RD&T Media Pack)	✓
Preloaded z/OS RDz daemons (Remote System Explorer, Lock, JES2 Monitor)	✓
Preloaded Microsoft Windows 7 Operating System	✓
Preloaded Windows RDz Eclipse-based GUI	✓
ITC Customization Service – IP Addressing	✓
Rational Developer for System z Product Edition (Software and User License(s))	✓
Rational Developer for System z Unit Test (User and Media License(s))	✓
Hardware Warranty – 3 Years – provided by manufacturer	✓
ITC ReDD Tools & Utilities	✓
ITC ReDD Backup/Restore Application with external USB HDD	✓
ITC ReDD Level1/Level 2 Technical Support – 3 Years	✓
ITC System ReDD Telephone Training (2 Hours)	✓



Under the Hood

ITC developed System ReDD to remove the guesswork, reduce the complexity and provide rapid deployment of a fully functional RD&T test system to your development teams. No valuable developer time is spent on planning, building, testing or supporting an RD&T environment from scratch.

System ReDD components consist of high performance x86-based hardware with virtualization technology, Red Hat® Enterprise Linux® (RHEL) 6 with Kernel Virtual Machine (KVM), the z1090 (zPDT software code and USB hardware key), and z/OS 1.12/1.13. These individual components are installed, configured and optimized to work together seamlessly and provide the end user with a completely integrated System z development environment. ITC has optimized and tuned System ReDD at all levels to ensure that end-to-end performance provides a great user experience.

Until now, single developer systems such as one deployed on a laptop, required that users install and configure RD&T and RDz on two separate platforms, adding to the system's cost and complexity. ITC combines RDz and RD&T on the ReDD Mobile system to offer developers one complete, self-contained development system – ready for use out of the box.

ITC provides Level 1 & 2 technical support for your System ReDD.

IBM Entitlement and Licensing

RD&T is licensed for development and testing of applications that run on IBM z/OS. The program may not be used to run production workloads of any kind, nor run more robust development workloads including, without limitations, production module builds, pre-production testing, stress testing, or performance testing.

If additional IBM Rational products are installed,



Full Throttle

ReDD Mobile™ enables the single developer to use the development system anywhere, providing mobility as required.

ReDD Midrange™ enables a small development team with greater processing capacity, more memory (greater than 16GB) and RAID-5 disk capacity. For larger development team requirements,

ReDD Enterprise™ is deployed on a more robust IBM System x® server providing faster processing, larger memory sizes and faster disk I/O.

The ReDD systems provide for zIIP or zAAP processing engine options.

IBM Rational licenses are required for each RD&T user. All users must be licensed to the RD&T level.

The RD&T environment is licensed and activated through a USB hardware key (1091 token) which is provided with System ReDD. The RD&T software will not function without the presence of the key.

The included IBM software products are provided for development purposes only on an as-is basis. No technical support or APAR/PTF deliverables are provided for the included software as listed in the Supporting Programs section of the product license with your purchase of the Rational Development and Test Environment for System z.

The ITC Advantage

Since its formation, ITC has pioneered the way in advancing mainframe technology. ITC's expertise spans nearly 30 years of working alongside the head scientists in IBM Poughkeepsie – the company being the first to distribute the IBM P/370 and P/390 systems, and the S/390 Integrated Server. No other company has ITC's background and experience with IBM.

ITC has performed extensive research & development with the IBM zPDT product, producing the System UltimatePDT™ (uPDT™) product for IBM System z Independent Software Vendors. This experience has enabled ITC to create an underlying RD&T environment that meets demanding System z application development requirements for reliability.

It was, therefore, only fitting that IBM chose ITC to be its partner in expanding their zPDT technology. With a vast customer base in the federal, commercial, and international markets, ITC is well suited to establish System ReDD and its benefits.

What does this mean to you? System ReDD is ready to deploy immediately within your development organization for productive application development and testing use.

ITC provides a full range of optional services covering education, installation, customization, networking, and data management in support of your mainframe project.

Additional Information

To learn more about the IBM zPDT technology and how ITC's System ReDD solution can help your organization, please visit: www.p390.com/ReDD.htm

Or contact: John Cotte, VP System ReDD Sales • 703-237-7370 ext.107 • email: jcotte@p390.com



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