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## [Introducing the Windows Vista Recovery Environment](#)

### *To deal with the operating system's boot failures*

The Windows Recovery Environment is an automated customer support tool integrated into Windows Vista, designed to deal with boot failures. Windows RE automatically performs the tasks of a runtime environment, a diagnostic tool and a repair system, taking the user out of the debugging equation. Microsoft has narrowed down a top consisting of five issues involved with a boot failure: 1) registry corruptions, 2) corrupt file systems (also known as NTFS metadata corruptions), 3) missing OS loader, 4) inaccessible boot devices (often caused by installing a bad storage driver) and 5) system file corruptions (some part of the OS getting deleted). "These problems could happen because of hardware memory corruptions, disk corruptions, other hardware issues, buggy device drivers, or a kernel software issue. Regardless of how the system got into that state, the idea was to create an environment that would use heuristics to essentially implement a differential diagnosis to identify the issue and then use the resources in the other parts of the system configuration, combined with back-up data (such as system restore points) and a copy of key system image information to put the system back into an operating state -- without user intervention," revealed Jim Allchin, Microsoft Co-President, Platform and Services Division. Windows RE will launch automatically once it has detected a failed boot if it is already installed on a separate partition on the system, or it can be accessed via F8. Otherwise Windows RE can be launched manually via the Windows Vista DVD or the on-disk recovery environment. "Once loaded, the Startup Repair starts checking for potential problems to see why the system failed to boot by grinding through the following questions: Is the problem a missing or damaged boot configuration file? Is the problem due to missing or damaged system files? Is it due to a missing or damaged driver? An incompatible driver? An incompatible OS update?" added Allchin. Windows RE will attempt to resolve the problem alone as long as the issue is software related. The system will only report hardware malfunctions.