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inux has proven to be a true phenomenon that the technology world sees rarely, if ever. By itself and at a high level, the technology that makes up the Linux operating system has been implemented before, either in the multiple UNIX implementations over the years or other commercial grade operating systems such as VMS and others.

The real phenomenon is the open source development process. The community development process is the reason that Linux has moved from interest and participation exclusively by hobbyists and computer scientists to that of end users who need truly scalable, commercial grade operating systems.

Never before has a single common operating system been used to solve problems at the very low end, scaled through 64-bit systems to large-scale, high-performance clusters to main-frame class architectures and all the way to the data center, while encompassing most any application in between.

No single operating system has been capable of spanning that wide range. No single operating system has gone across so many architectures.

To bring an operating system from no commercial relevance to the fastest growing technology in the commercial world in less than three years has much to say about the process in itself and the participation of the diverse community.

The strength of the open source model has gotten the attention of most all of the commercial vendors in the IT space. This has contributed to a change in the makeup of the community who participates in Linux development.

There are many more developers who now contribute within the process on a full-time basis while being paid by those commercial, proprietary vendors. Certainly the engineers with a passion for open source, as well as engineers who work for commercial Linux vendors such as Red Hat, still contribute heavily to the process, but the combination has helped drive what's getting attention from the community to more high-end enterprise features. It has also allowed for a wider range of hardware to be tested and ported to, as well as much larger workloads by the commercial applications.

You can see how this process, with such diverse participation and now with access to all hardware (e.g., HP Itanium-based Integrity Servers) and workloads, has allowed for Linux to

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mature in such a short timeframe. It is essentially not one company that is maturing the operating system—as is the case with a proprietary operating system—but rather the industry as a whole. The only thing that makes this possible is the openness of the process itself combined with the operating mantra of "let the best technology win" when decisions need to be made on implementation directions by the community.

Arguably, the Linux kernel is the largest open source project to ever be assembled. It is also now easy to say that it is the most successful. We are now starting to see the success of the kernel project and the open source development process as the catalyst in driving other open source projects that are focused on other pieces of the computing infrastructure.

These technologies are starting to find their way into the enterprise in commercial grade use and applications; whether in storage or application servers, open source is now becoming mainstream in the commercial environment. The success of Linux has proved the model. I am confident that we will continue to see more of the commercial computing infrastructure built on open source in the years to come.

This book covers Red Hat Enterprise Linux on HP's Integrity Servers. This high-end product line further demonstrates that Linux has truly moved into the enterprise. Marty Poniatowski does an excellent job of providing information to get you up and running quickly with Red Hat Linux on HP Integrity Servers so that you can reap the benefits of Linux in your data center.

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