

# A Slice of NonStop

NED's Distinguished Technologists – They're Not Old, Just Really Experienced

Janice Reeder-Highleyman

Janice Reeder-Highleyman prefers the use of hair dye as an alternative to looking too distinguished. She leaves that dignified, authoritative, and noble appearance to the Distinguished Technologists she interviewed for this article - the eleventh Slice of NonStop Janice has volunteered to write for The Connection. What continues to amaze her is how many extraordinarily gifted individuals populate the virtual halls of HP's NonStop Enterprise Division. Clearly, more Slice of NonStop articles are needed. Contact this freelance writer, editor, marketing specialist, and former ITUG chair at jreederhi@nac.net.

HP Distinguished Technologist Vinay Gupta remarks that whenever people meet him for the first time, they are always surprised at how much younger he is than they expected. It must be that word "distinguished." It implies the possession of great dignity and nobility in appearance or behavior. Eminent, authoritative, imposing – they are all synonyms for distinguished; and they make Vinay and the NonStop Enterprise Division's four other Distinguished Technologists (DTs) sound very, very old. It's no wonder that I once called Wendy Bartlett an *Extinguished* Technologist.

Distinguished also refers to the achievement of great success and to be deserving of respect. These are the words most appropriate for NED's Distinguished Technologists. In addition to Vinay and

Wendy, it is Jim Smullen, Darrell High, and Tom Kondo who possess the broad range of technical skills and influence required to hold this high-level HP title. They aren't kids, but they aren't ancient. They are all just really experienced.

## What the Heck is a Distinguished Technologist?

Two career advancement paths exist in high-tech organizations such as HP. One is managerial, and one is technical. The managerial path rewards those individuals who are interested in and highly adept at supervising staff and at organizing project resources. They own the performance reviews and the career growth of those who report to them. Not everyone, however, has "people" management ambitions. Some prefer to remain deeply embedded in the technologies that first attracted them to their jobs. Thus, advancement along the technical path recognizes individuals whose technical contributions have made lasting impacts on the success of an organization's business, as evidenced in direct revenue, in operational processes, or in strategic direction at multiple levels. Those who succeed excel at solving complex technical problems and possess impressive expertise and authority in their fields. They are technology managers instead of people managers; yet at the level of Distinguished Technologist, they may work more in Word and PowerPoint than in code.

HP's technical ladder is constructed of multiple rungs – Expert, Master, Distinguished Technologist, Fellow, and Senior Fellow. Experts demonstrate great skill in a

specific subject matter. A Master leads a team and will have influence across a business unit. A Distinguished Technologist leads and coordinates a set of teams and influences more than one business unit. Fellows and Senior Fellows lead areas of technology and have influence not only throughout HP but externally as well.

Titles on the technical ladder run fairly parallel to those on the managerial ladder. A Distinguished Technologist, for instance, is comparable to a Director. A Fellow is equivalent to a Vice President. Currently, and primarily through retirement, there are no Fellows or Senior Fellows in NED. That makes Wendy, Jim, Darrell, Vinay, and Tom the senior technical members of the division, with most reporting to different executives in the managerial space - Wendy and Jim to Fred Laccabue, Darrell to Frank Rone, and Vinay and Tom to Andy Bergholz. The role of a Distinguished Technologist brings with it tremendous responsibility and requires a range of skills that are often brought to bear on determining product direction and at times product creation.

## Distinguished Technologists Breathe Rarefied Air – The Vetting Process

**Position:** Distinguished Technologist

**Job Summary:** Highly experienced self-starter who possesses broad technical expertise, leadership ability, exceptional communication and cooperation skills, and the strategic perspective required to influence roadmap decisions and to work on large, complicated, "hairy" projects in order to make something great happen.

Tom Kondo considered applying for the position of Distinguished Technologist but wasn't sure he was qualified. That all changed when Tom, an HP Master, was assigned to a project team composed largely of HP Fellows. Their positive remarks about his performance and their encouragement convinced Tom to apply for consideration.

No specific limits define how many Distinguished Technologists can exist within HP. However, few people in the organization carry that title. Adding more members to this group is primarily a function of whether there is enough work for individuals at that level and who satisfies the strict promotion guidelines.

Once a candidate and his/her manager decide to make application, they compile a nomination package. It includes multiple letters of recommendation. For a DT applicant, at least one must be from an outside source – usually from a customer but sometimes from a key

supplier or vendor. The manager and applicant work with a review board representative – Wendy for NED – to make sure the nomination package is in order before submission. Wendy is a member of the Technical Career Path Review Board (TCP Review Board) for the Business Critical Systems Division (BCS), of which NED is a part. Other review boards exist elsewhere within HP, and they all work within the same formal guidelines for promotion. The Corporate TCP Review Board must approve promotions to Fellow and Senior Fellow.

BCS' Technical Career Path Review Board meets quarterly and reviews candidates for the Master level and above. The board is entirely composed of technical members who are mostly either Fellows or Distinguished Technologists. Managers must recommend their employees, but it is the review board that makes the decision. Determinations are based on multiple dimensions of technical expertise and leadership. Those who are promoted exhibit a depth and breadth of knowledge and influence outside their immediate areas of responsibility. They are innovative and understand the strategic implications of technology's impact on HP's bottom line. Many successful candidates have multiple publications. Some, as is the case with all of NED's Distinguished Technologists, are inventors and have patents. Jim, for instance, is NED's patent coordinator and is the co-inventor of eight patents.

## No Distinguished Technologist Operates in a Silo

To paraphrase the 17th century English poet John Donne ("No man is an island"), HP's Distinguished Technologists do not limit themselves to one silo of technical expertise. Vinay and Tom, for instance, regularly work on wide-ranging initiatives that cross HP business units. Among their other responsibilities, Vinay currently serves as technical lead for pan-ESSN architecture development of availability collections and analytics for servers, storage and networking devices. Tom is the telecommunications architect and technical liaison between NED and the Open Call business unit. Jim and Darrell devote more of their time to NED-specific projects. Although Jim is lead architect for NB54000c and NB50000c development, and Darrell delves deeply into several aspects of the NonStop Kernel, both are called upon to contribute their operating-systems expertise to non-NED projects that parallel their own work. Wendy considers herself to be the generalist of the group and gets to "stick her nose" into all kinds of programs that attract her attention. As the security architect for the NonStop platform, she interfaces with security experts in other HP business units.

One responsibility of NED Distinguished Technologists is to make NonStop technologies known and available to other parts of HP. A good example is that NonStop input is a significant driver in the HP Converged Infrastructure architecture work. When a NonStop DT such as Tom or

Vinay talks about fault tolerance or system management, engineers really pay attention.

Encouraged by HP, Distinguished Technologists are wonderful networkers and have cultivated contacts throughout the enterprise. By virtue of their ability to cross business-unit barriers, they succeed in integrating a wide range of technologies into the development of new products. Distinguished Technologists also are strategists and serve on the appropriate roadmap teams.

## Meet NED's Distinguished Technologists

Among NED's five Distinguished Technologists, there exist five different career paths. Wendy, Jim, Darrell, Vinay and Tom are all senior members of the HP organization and joined HP via Tandem and Compaq. They are highly technical, possess extensive experience, contribute loads of institutional memory, and have important roles to play. Beyond those commonalities, they are all different; and they approach their jobs in five unique ways.

**Wendy Bartlett** - Wendy was a "child programmer" when she first joined Tandem Computers in 1978. Her tenure is the longest of all the NED Distinguished Technologists, and her 30+ year presence and long association with ITUG and Connect have made her a familiar face to everyone in the NonStop community. Got problems? Call Wendy...but not until you have contacted the Global NonStop Solution Center (GNSC).

She joined Tandem as a journeyman software designer and moved up the technical ladder to Software Designer 6 (Tandem's DT-equivalent position), with a several-year detour through management. Wendy achieved Level 6 via her work as the architect of Tandem's operating system overhaul (Exceed, 1986-1993), where, as Wendy puts it, "we rescaled the operating system without breaking anything." When HP created its technical career path after the Compaq merger, Wendy was classified as a Distinguished Technologist.

Her coding days behind her (by choice), Wendy focuses on architecture and design. She currently is the security architect for the NonStop platform, has technical oversight for several NED projects, and serves as a consultant on others. Wendy considers herself to be a generalist, and her position affords her an impressive amount of latitude as to the responsibilities she assumes. She frequently defines her own jobs, one of which is leading the team that reviews all requests to make potentially incompatible product changes.

*Sidebar on Wendy:* When she is not working, Wendy is either singing with Bay Choral Guild in Palo Alto or hiking and otherwise hanging out with her husband, Joel. She has been the primary member of the original "NonStop process pair" since Joel, who was the Guardian OS architect, left Tandem in 1986.

**Jim Smullen** – After Wendy, the next longest tenure

on the NonStop platform belongs to Jim. An operating systems specialist, he arrived at Tandem in 1987 and went to work on file system development for Wendy's system overhaul project (Exceed). He later became the lead file system developer for NonStop Open System Services (OSS). As that project grew in scope and scale, extending beyond its originally determined parameters, Jim's reputation grew with it. By the time of the Tandem/Compaq merger, Jim had achieved Software Designer 6 status and made a lateral move into Compaq as a principal software engineer.

His next big project involved the NonStop port to Intel Itanium, and Jim continued that effort as Compaq merged with HP. Under HP, the project was code-named Yosemite. By now a Distinguished Technologist, Jim served as a lead architect. Yosemite evolved into the platform now marketed as HP Integrity NonStop.

Today, Jim is the lead architect for large, long-term platform projects, e.g., NB54000c and NB50000c development. He also serves as NED's patent coordinator and is the co-inventor of eight patents. Many Connection readers know Jim as a presenter not only at conferences but also to more targeted groups, including customers and partners. As is the case with all NED Distinguished Technologists, Jim represents the division in cross-BCS and ESSN projects and initiatives. Within the NED planning process and as a direct report to Fred Laccabue, Jim acts as a technical representative with regard to roadmaps and budgets.

*Sidebar on Jim:* For over 20 years, Jim has volunteered his scuba diving skills to the Monterey Bay Aquarium. He serves on a maintenance team that cleans the floors/windows of the large exhibits. He also does dive shows, holding two-way conversations with the audience and docent outside of the exhibit.

**Darrell High** – in Tandem years, Darrell is the “third-oldest” Distinguished Technologist. He joined Tandem at Level 5 in 1989, arriving from Unisys with significant experience in compilers and operating systems, and achieved Level 6 before the Compaq merger. Like many college students of his time, Darrell did not graduate with a degree in computer science. Most universities were not yet offering such degrees. Darrell was trained in physics as an undergraduate and earned his doctorate in biochemistry from the University of Washington, with post-doctoral work at the University of California, San Diego (UCSD). He first met a computer in graduate school, where his research involved deducing the structure of complex molecules using X-ray diffraction crystallography — a computation-intensive process. He then started system programming, organizing a suite of scientific applications, and gradually migrated from academic to industrial work. Darrell worked on UCSD’s proprietary operating system back when universities did such things and later moved to Burroughs, which became Unisys.

Of the five NED Distinguished Technologists,

Darrell cuts the most code. That's by choice; he loves coding. Throughout his tenure at Tandem, Compaq, and HP, Darrell has worked on a number of projects, all related to the operating system. He started as one of the architects for the migration of Tandem systems from proprietary processors to commercial microprocessors. For several years, he was architect and technical lead for the Dynamic-Link Library (DLL) feature on both TNS/R and TNS/E systems. He next led the development of 64-bit memory management. It shipped in stages, with the biggest portion in H06.20/J06.09. That project established the underpinnings for 64-bit processes, expected this winter.

Today, Darrell devotes his efforts to creating effective timekeeping mechanisms for synchronizing time across NonStop blades. He also is asked to consult on a variety of other programs, one of which is focused on improving the efficiency and instrumentation of binary semaphores. He is the co-inventor of a patent for a load-file synchronization mechanism developed during the DLL project.

*Sidebar on Darrell:* After a lifetime of (amateur) singing, Darrell is retired from the church choir. He's never been much into hobbies except for bending computers to his will. Darrell enjoys reading science fiction and assembling Lego kits with his grandson. He and his wife moved to Texas a decade ago to be near their daughter's family.

**Vinay Gupta** – Vinay is well known as a conference speaker and as a frequent contributor to The Connection and to HP's Mission Critical Computing Blog. He also tweets for HP\_NonStop on Twitter. In 1994, long before blogs and tweets became part of the daily vernacular, Vinay joined Tandem right out of college. Like the other HP Distinguished Technologists, Vinay is an inventor. He is the primary inventor of two patents and has three others pending.

Known among his colleagues as “Mr Manageability,” Vinay serves as the manageability architect for all NonStop systems. As such, he ensures that NonStop systems offer what Vinay says is a “best-in-class manageability experience for customers.” He is the architect of OSM, NonStop Essentials products and has served as the manageability architect of Integrity NonStop NS-Series servers, NonStop BladeSystems, CLIMs, etc. Vinay also provides consulting expertise in NonStop security.

Vinay's responsibilities extend beyond the division; and it is his breadth of influence that was a major factor in his promotion. He is the technical lead for pan-ESSN architecture development of availability collections and analytics for servers, storage and networking devices. He heads the pan-ESSN efforts on behalf of the self-healing and non-disruptive design workstream, including the reduction and elimination of downtime for planned and unplanned service actions. Vinay has been a driving force behind the integration of NonStop with HP-standard manageability products, such as

HP Systems Insight Manager (SIM) and HP BTO (Business Technology Optimization) products and cloud initiatives. He is well-known for his involvement with the Converged Infrastructure (CI) architecture; and he participates in such other pan-ESSN workstreams as support automation, common event management, and common diagnostics management.

*Sidebar on Vinay:* Not known (until now), Vinay is a poet. He has written thousands of poems in English and in his native language (Hindi), but he has never had any interest in having them published. They are only for him and his family. Vinay has been writing poetry since he was ten.

**Tom Kondo** – Among NED’s Distinguished Technologists, Tom is the “baby,” having just been promoted in the fall of 2011. From the comments of other NonStop staff, it is a long-overdue promotion, one that Tom did not seek initially because he wasn’t certain he was qualified.

Tom joined the NonStop family in 1997 during the Compaq merger and after having served as a Principal Engineer at Amdahl. From 1997 to 2006, he worked on ServerNet III and functioned as the technical lead for TNet Services. Many of the responsibilities Tom now undertakes cross HP business units. Currently, he is the telecommunications architect and technical liaison between NED and the Open Call business unit. He also is a key architect for networking, storage and system interconnect and oversees the CLIM Architecture Review Board. Tom serves on the pan-ESSN Converged Infrastructure (CI) architecture team as well as on the pan-ESSN Converged Infrastructure Security architecture team. Add to that Tom’s contributions over the years in several technologies, including NSAA, Power Management, Quality, RAS, and Stock Exchange products, and it leaves you wondering why Tom ever felt he was unqualified to be a Distinguished Technologist.

Tom is the primary inventor on seven patents and is co-inventor of one that is pending.

*Sidebar on Tom:* Check out [www.tomkondo.com](http://www.tomkondo.com). He has taught T’ai Chi for over 20 years, which perhaps makes him the most serene, stress-free individual among the Distinguished Technologists.

## The Good, the Bad, and the Truly Awesome about Being a Distinguished Technologist

Doors open for Distinguished Technologists. Hard-to-reach people return their calls. They possess a great deal of input about the responsibilities they are assigned, and willing ears listen when they pitch project ideas. How truly awesome is the world of a Distinguished Technologist.

Wendy enjoys the opportunity to participate in broad-ranging discussions and to influence the direction of NED solutions. Jim takes real pleasure in that good feeling he gets when progress in an area is made by virtue of the scope of his position. Tom already is seeking

new intellectual property to develop in 2012, and Vinay loves his involvement with customers and their strategic challenges. Darrell, who at heart remains a coder extraordinaire, relishes his roles in roadmap strategy and software design.

If there is a “bad” to being a DT, it’s that you have to be very careful about what you say in public. “Distinguished Technologist” is such a highly-respected position that anything they say may be assumed by others to be gospel. Tom has learned to avoid off-the-cuff statements, Jim still remembers the first time that someone quoted to Jim his very own quote, and Wendy learned the hard way that thinking out loud can be mistaken for making a decision.

Aside from the need for cautious communication, our NED Distinguished Technologists relish the individual roles they play within the company. The position is not awarded frequently, and it’s earned only by those with expansive technical skills acquired over years. We’re not implying, of course, that Wendy, Jim, Darrell, Vinay, and Tom are incredibly old. All five are just really experienced. ☐