Until now, there has been no unified, common approach to develop and deploy value-added Broadband services and networks. The only way for consumers and small business to create a customized experience has been via expensive hand crafted systems available to a tiny minority. Service Providers of all kinds have been unable to provide new value-added services for broadband users that people not only want but are so freely available on today’s smartphones. This has effectively isolated both the home and the home user.

Intelligent User Services Platform Description

This new Broadband Forum project defines a standardized mechanism by which a network of controllers and agents communicate to activate, manage, monitor, diagnose, and control a broadband user’s network enabled services. This includes a wide array of use cases including managed broadband services, smart home and smart building applications, small business services, and management of multi-tenant facilities.

The project defines a data model, architecture, security and communications protocol to transform consumer broadband networks into an intelligent platform for the development, deployment, and support of broadband enabled applications, small business services, and management of multi-tenant facilities.

Building on Broadband Forum Experience and Vast Installed Base

The project represents ongoing evolutionary development of the Broadband Forum’s TR-069 and related specifications from a device specific to service specific orientation. TR-069 is the BBF’s most widely implemented and deployed management protocol for broadband customer premises equipment with 350 million managed devices worldwide. This encompasses configuration, activation, fault and performance monitoring. Support for machine-to-machine and Internet of things with implementations of TR-069 is another indication of market-lead demand for new work in this area.

Enhanced Capabilities and Seamless Migration

Broadband 20/20 developments of TR-069 build on the global acceptance as the standard for automated management of customer premises equipment. The experience gained will continue to be invaluable. Central to the evolution of TR-069 for new services is development of control protocols and enhanced security that required for trusted deployment of virtualized services and the Internet of Things.

Broadband 20/20 Intelligent Home and Business Services are being developed to leverage the Forum’s SDN & NFV, Architecture and Migration Routing & Transport, Work Areas. With such a vast number of existing installations not the least of these is migration so that smooth market-driven transitions and protection of existing investment can be effected.
Implementation Scenarios

For Consumers
Imagine a world where consumers can buy and automatically install smart home and other network enabled devices or add services and applications as easily as buying an app for their smart phone. This is at the heart of what is being enabled by this important project.

For Broadband and Application Service Providers
Imagine a world where broadband and application service providers can offer an endless number of applications to consumers hungry for advanced broadband and intelligent home/business services. Consumers are eager to adopt these new connected resources into their digital lives, creating a valuable market for both service and application providers.

The project is specifically designed to provide tools for service providers to create and manage services expanding beyond the home gateway, such as home automation, security, and on-demand network services, blending seamlessly with the growing Internet of Things and the expansion of broadband and mobile capabilities.

For Application and Device Developers
Imagine a world that allows application and device developers a way to treat home and business user networks as a platform to build limitless numbers of apps and specialized devices that are guaranteed to work, and work well, together.

Sample Use Cases
- Home Security Ordered from an App Store
- Gamer Looking to Prioritize Game Traffic
- Advanced Diagnostics and Network Topology
- Discovery for Customer Support
- Retail Plug and Play of Smart Home Devices
- Smart Phone as a Control Point
- Consistent User Experience from Mobile to Home
- Service Provider Portals

Impact on Stakeholders

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<td>Basic services, Best effort</td>
<td>Ultrafast Speeds, QoE, IoT</td>
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<td>Responsive, dependable, Always available, flexible access</td>
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<td>For Operators</td>
<td>Infrastructure oriented</td>
<td>Service oriented, New valuable network and CPE services</td>
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<td>Expanded reach with high speed Wireless offload, unlock existing bandwidth</td>
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<td>Application Providers</td>
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<td>Equipment Manufacturers</td>
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Publicly available resources and related document references

Broadband Forum Broadband 20/20 Vision
MR-278 Managing M2M systems with TR-069

About the Broadband Forum
The Broadband Forum is the industry’s defining body for LAN/WAN architecture design, implementation, management and certification testing for technologies, both existing and emerging, in the Broadband market. Our work encompasses best practices for global networks, enables new revenue-generating service and content deliver. It establishes technology migration strategies, engineers’ critical device, service and development management tools, in the home and business IP networking infrastructure. Broadband expertise is sourced from more than 150 manufacturers and service provider companies, the Forum has published over 200 globally adopted standards over the last 24 years. Activity levels driven by the emergence of ultra-fast connectivity, IoT, NFV and SDN and the new Broadband 20/20 initiative have seen contribution levels rise to more than 1200 in the last 12 months.