

Establish a standard network architecture and management practices for the UW institutions

DESCRIPTION OF THE SERVICE

UW-Shared Services will work with UW System Administration and institutional IT departments to design a standardized UW System Local Area Network architecture, including establishing best network standardization practices for UW institutions to follow. UW-Shared Services will also establish hardware standards for network components including firewalls, switches, bandwidth, wireless access points and management systems. UW institutions will implement standard best practices as soon as feasible and implement standardized hardware components when new or replacement equipment is purchased.

SOURCE OF THE SERVICE

Institutional visits and feedback from: Chief Information Officers/IT Directors and UW System Administration

These network standardization practices should allow for the quick and efficient implementation of information security initiatives and for a uniform end-user experience across UW institutions. UW-Shared Services will work with the institutions to design and deploy the common network architecture, but the institutions will be responsible for and own the implementation of the network standards.

FORMS OF THE SERVICE

ACTIONS



On-Demand

Ongoing

Monitoring

UW-Shared Services will not process or monitor UW institutions' network configurations or implementations through this service but could in the future given further interest from the institutional IT departments.

STANDARDS



Practices

Trainings

Systems

UW-Shared Services will establish standards for network architecture and management practices of networks for institutions to implement.

UW-Shared Services will provide support to institutional IT departments, but formal training for institutions on their networks is not warranted.

UW-Shared Services will not manage institutional networks directly but will maintain practices on its enterprise systems like the public website.

SUPPORT



Passive

Distance

In-Person

UW-Shared Services will provide information and guidance on the network architecture to UW institutions through the Resource Center on its website.

Customers will be able to ask for support and guidance on the network standards by calling or contacting the UW-Shared Services IT help desk.

UW-Shared Services only plans on providing support on the network standards remotely; institutions would own their own networks on-site.

ANALYSIS

BENEFITS	RISKS
<ul style="list-style-type: none"> • Decreases financial, regulatory, reputational, and legal risk through standardization and consistency • Could improve network security environment through standardization • Could lead to improved network access, end user experience, and continuity across the institutions • Relatively inexpensive to scale across the system 	<ul style="list-style-type: none"> • May require significant capital investment by UW System Administration to accelerate implementation • Could result in a long implementation if architecture/standards are changed as equipment is replaced • Could negatively impact end-user experience if not implemented appropriately and with adequate communication channels

PARTICIPATION MODEL

The *Network Standardization* service should be mandatory for all comprehensive institutions given the need to mitigate the high impact and risk posed to faculty, students, and staff by network issues. Offering a standard architecture and common management practices for all UW institutions should be a relatively inexpensive means of mitigating this risk.

RECOMMENDATION
<p>MANDATORY PARTICIPATION For UW System comprehensive institutions and UW System Administration</p>

Also, the level of complexity and difficulty in standardizing the architecture should be manageable given the nature of network configurations and the limited differences between institutions in their existing network standardization practices. Overall, UW-Shared Services should be able to provide a higher quality end-user experience across the UW System, provide guidance to UW institutions on the standards, and providing standard best practices that ensure institutions are able to manage their networks as part of the larger unified UW System community.

FUNDING MODEL

The *Network Standardization* service should be funded by UW-Shared Services base funding. Institutions should not be charged directly for this service, given potential for significant capital investment, the desire to incentivize use of the architecture, and reduction of the administrative burden of charging for this service.

RECOMMENDATION	
<p>TRANSACTIONAL CHARGEBACKS</p>	<p>BASE FUNDING + CHARGEBACKS</p>
<p>CAMPUS ASSESSMENT</p>	<p>BASE FUNDING This service should be funded by UW-Shared Services base funding</p>

Given the high impact on students, faculty, and staff associated with network issues, UW-Shared Services should ensure that institutions leverage the network architecture and practices. Institutions will still be responsible for managing their own networks, so UW-Shared Services' costs for this service would be limited to maintaining the standards and consulting with the institutions on their implementations. Charging through fees or chargebacks could create disincentives to using the architecture.

Also, the administrative effort to monitor the use of UW-Shared Services' architecture and consultation services would likely be prohibitively high and reduce the value of this service. UW-Shared Services should focus on ensuring the network architecture is high-quality, meets institutional needs, and reduces risk across the UW System. Allocating base funding for this service should establish the appropriate incentives to fully utilize the network practices and architecture and should limit the administrative effort required to manage the funding model.