Borderless Innovations – Everywhere (Instructor Version)

**Instructor Note**: Red font color or Gray highlights indicate text that appears in the instructor copy only.

1. Objective

Describe borderless networks components.

Instructor Note: This activity can be completed individually or in small or large groups.

1. Scenario

You are the network administrator for your small- to medium-sized business. [Borderless network services](http://www.youtube.com/watch?v=lCg2HctgvJE&list=PL0840182B300A282E) interest you as you plan your network’s future.

While planning for network policies and services, you realize that your wired and wireless networks need manageability and deployment design.

Therefore, this leads you to consider the following Cisco borderless services as possible options for your business:

* Security – ***TrustSec***
* Mobility – ***Motion***
* Application Performance – ***App Velocity***
* Multimedia Performance – ***Medianet***
* Energy Management – ***EnergyWise***

1. Resources

* World Wide Web access
* Word processing or presentation software

1. Directions
   1. Select three Cisco borderless network services that interest you from the following list:
      * Security – ***TrustSec***
      * Mobility – ***Motion***
      * Application performance – ***App Velocity***
      * Multimedia performance – ***Medianet***
      * Energy management – ***EnergyWise***
   2. Using the Internet, research your three selections. Consider finding short video presentations and various websites of the three borderless network services you selected. Be sure to take notes on your research:
      1. Based on your research, create a basic definition of each borderless network service.
      2. List at least three areas of assistance each borderless service offers to network administrators.
   3. Prepare an informational matrix listing the three borderless network services you selected. Include the video notes you completed in Steps 2a and b.
   4. Share your matrix with another student, group, or the entire class.

**Note: As students listen to group presentations, they can take notes and submit them to the Instructor.**

Suggested Activity Example (student designs will vary):

|  |  |  |
| --- | --- | --- |
| **Borderless Network Service** | **Basic Definition** | **Borderless Services Offered** |
| Security – ***TrustSec***  [The Power of Cisco ISE](http://www.youtube.com/watch?v=6-NWhAJ7DUk&list=PL0840182B300A282E) | A comprehensive borderless network service that focuses on security for wired and wireless networks. | Centralized security management.  Choices for security management policies implementation.  Provides a log for security violations, in both live and historical formats.  It is transparent to users.  [Cisco Identity Services Engine](http://www.cisco.com/en/US/products/ps11640/index.html) |
| Mobility – ***Motion***  [Cisco Data In Motion](http://www.cisco.com/en/US/solutions/ns1168/data_motion.html) | A borderless network service that allows network administrators to gather data from sensors, mobile devices, and video cameras to help make decisions and communicate in real-time. | Connects IoE borderless data from manufacturing floors, energy grids, healthcare facilities, and transportation systems.  Consolidates data to help customers improve data operations, while saving valuable time and money.  Helps businesses share data and build a business case for change.  [Data in Motion](http://www.cisco.com/en/US/solutions/ns1168/data_motion.html) |
| Application performance – ***App Velocity***  [Application Velocity](http://www.youtube.com/watch?v=3MMkXFdVBBk) | A borderless network service that uses application-based delivery systems to enhance communications between businesses, customers, and clients. | Delivers real-time, language-translation services  Allows businesses to use network applications to share research and communicate new ideas to each other  Centralizes network applications for simplified delivery and management, reducing operational costs  [Application Performance Management Service](http://www.cisco.com/en/US/netsol/ns670/networking_solutions_solution_category.html) |
| Multimedia performance – ***Medianet***  [Video-ready Network with Cisco MediaNet](http://www.youtube.com/watch?v=PKv6sXcQdsM) | A borderless network service which allows for easy wired and wireless configuration, media monitoring, and low-cost multimedia operations. | Keeps track of multimedia traffic that flows on the network.  Helps reduce operating costs with fast troubleshooting of video, voice, and data errors.  Enables precise assessment of the impact that video, voice, and data have on the network.  [Medianet Architecture](http://www.cisco.com/web/solutions/trends/medianet/indepth.html) |
| Energy management – ***EnergyWise***  [Lights Out - Cisco EnergyWise](http://www.youtube.com/watch?v=mDgg64AxDbE) | A borderless network service that reduces energy costs by using wired and wireless devices. | Enables communications in real time internationally using wired and wireless device delivery systems.  Saves energy costs by delivering information quickly and efficiently.  Saves energy and time by deploying network services instead of using collective human resources efforts.  [Borderless Networks](http://www.youtube.com/watch?v=7TBZjl4l55I) video |

1. Identify elements of the model that map to IT-related content:

* Borderless network services
  1. Security – TrustSec
  2. Mobility – Motion
  3. Application performance – App Velocity
  4. Multimedia performance – Medianet
  5. Energy management – EnergyWise
* Policy strategy planning for borderless network services