WISCONSIN Hosting Infrastructure Reports

Wisconsin 2012

1. Description

- This project is conducted under the supervision of PI Barford who is the director of the Wisconsin Advanced Internet Laboratory (WAIL), which is located in the Computer Science Department at the University of Wisconsin – Madison.

2. System Inventory

- WAIL is a 2000 sqft. climate controlled, raised floor facility. The goal of WAIL is to enable a broad spectrum of experimental network research and support hands---on projects in courses using equipment commonly found in the Internet. In addition to the ability to experiment with network configurations, WAIL has significant computational and storage capability and can be used as a traditional data center environment for cloud computing--- related research. This facility has been enabled through industry sponsorship and support from the National Science Foundation. WAIL connects to the WINGs mobile systems lab and CloudLab at UW---Madison. WAIL is part of a larger federation of network research laboratory systems including Utah's Emulab, ISI's DETER lab and the NSF GENI project. WAIL also hosts systems that are part of PlanetLab. WAIL is openly available for public. Since becoming generally available, it has been used by hundreds of researchers and students from all over the world in a wide variety of experiments.
- At present, general purpose computing and storage equipment in WAIL that is related to and available to the PREDICT project includes but is not limited to:
    - 220 Intel---based, general purpose, rack mounted computers configured with 1 --- 3.5 GHZ processors, 2---4 GB RAM, 35 --- 120 GB disks and 10/100/1000 Mbps Ethernet
    - 9 x 5.6 TB Apple RAID arrays
- There are a number of pieces of infrastructure that are fully dedicated to the Internet Atlas project including a high---performance computing engine with 10TB of storage that is used to host the Atlas repository and web server.
- The University of Wisconsin currently maintains three data sets for PREDICT: BGP updates, the DSHIELD firewall logs and Internet Atlas. The total storage required for these data sets is 3.0TB. The growth in storage needs is modest at about 200GB/yr. Thus the current infrastructure should be viable for the duration of the project.

Wisconsin 2013

1. Description

- This project is conducted under the supervision of PI Barford who is the director of the Wisconsin Advanced Internet Laboratory (WAIL), which is located in the Computer Science Department at the University of Wisconsin – Madison.

2. System Inventory

- WAIL is a 2000 sqft. climate controlled, raised floor facility. The goal of WAIL is to enable a broad spectrum of experimental network research and support hands---on projects in courses using equipment commonly found in the Internet. In addition to the ability to experiment with network configurations, WAIL has significant computational and storage capability and can be used as a traditional data center environment for cloud computing--- related research. This facility has been enabled through industry sponsorship and support from the National Science Foundation. WAIL connects to the WINGs mobile systems lab and CloudLab at UW---Madison. WAIL is part of a larger federation of network research laboratory systems including Utah's Emulab, ISI's DETER lab and the NSF GENI project. WAIL also hosts systems that are part of PlanetLab. WAIL is openly available for public. Since becoming generally available, it has been used by hundreds of researchers and students from all over the world in a wide variety of experiments. WAIL also hosts systems that are part of PlanetLab. WAIL is openly available for public. Since becoming generally available, it has been used by hundreds of researchers and students from all over the world in a wide variety of experiments.
- At present, general purpose computing and storage equipment in WAIL that is related to and available to the PREDICT project includes but is not limited to:
    - 220 Intel---based, general purpose, rack mounted computers configured with 1 --- 3.5 GHZ processors, 2---4 GB RAM, 35 --- 120 GB disks and 10/100/1000 Mbps Ethernet
    - 9 x 5.6 TB Apple RAID arrays
- There are a number of pieces of infrastructure that are fully dedicated to the Internet Atlas project including a high---performance computing engine with 10TB of storage that is used to host the Atlas repository and web server.
- The University of Wisconsin currently maintains three data sets for PREDICT: BGP updates, the DSHIELD firewall logs and Internet Atlas. The total storage required for these data sets is 3.0TB. The growth in storage needs is modest at about 200GB/yr. Thus the current infrastructure should be viable for the duration of the project.

Wisconsin 2014

1. Description

- This project is conducted under the supervision of PI Barford who is the director of the Wisconsin Advanced Internet Laboratory (WAIL), which is located in the Computer Science Department at the University of Wisconsin – Madison.

2. System Inventory

- WAIL is a 2000 sqft. climate controlled, raised floor facility. The goal of WAIL is to enable a broad spectrum of experimental network research and support hands---on projects in courses using equipment commonly found in the Internet. In addition to the ability to experiment with network configurations, WAIL has significant computational and storage capability and can be used as a traditional data center environment for cloud computing--- related research. This facility has been enabled through industry sponsorship and support from the National Science Foundation. WAIL connects to the WINGs mobile systems lab and CloudLab at UW---Madison. WAIL is part of a larger federation of network research laboratory systems including Utah's Emulab, ISI's DETER lab and the NSF GENI project. WAIL also hosts systems that are part of PlanetLab. WAIL is openly available for public. Since becoming generally available, it has been used by hundreds of researchers and students from all over the world in a wide variety of experiments. WAIL also hosts systems that are part of PlanetLab. WAIL is openly available for public. Since becoming generally available, it has been used by hundreds of researchers and students from all over the world in a wide variety of experiments.
- At present, general purpose computing and storage equipment in WAIL that is related to and available to the PREDICT project includes but is not limited to:
    - 220 Intel---based, general purpose, rack mounted computers configured with 1 --- 3.5 GHZ processors, 2---4 GB RAM, 35 --- 120 GB disks and 10/100/1000 Mbps Ethernet
    - 9 x 5.6 TB Apple RAID arrays
- There are a number of pieces of infrastructure that are fully dedicated to the Internet Atlas project including a high---performance computing engine with 10TB of storage that is used to host the Atlas repository and web server.
- The University of Wisconsin currently maintains three data sets for PREDICT: BGP updates, the DSHIELD firewall logs and Internet Atlas. The total storage required for these data sets is 3.0TB. The growth in storage needs is modest at about 200GB/yr. Thus the current infrastructure should be viable for the duration of the project.

Wisconsin 2015

1. Description

- This project is conducted under the supervision of PI Barford who is the director of the Wisconsin Advanced Internet Laboratory (WAIL), which is located in the Computer Science Department at the University of Wisconsin – Madison.

2. System Inventory

- WAIL is a 2000 sqft. climate controlled, raised floor facility. The goal of WAIL is to enable a broad spectrum of experimental network research and support hands---on projects in courses using equipment commonly found in the Internet. In addition to the ability to experiment with network configurations, WAIL has significant computational and storage capability and can be used as a traditional data center environment for cloud computing--- related research. This facility has been enabled through industry sponsorship and support from the National Science Foundation. WAIL connects to the WINGs mobile systems lab and CloudLab at UW---Madison. WAIL is part of a larger federation of network research laboratory systems including Utah's Emulab, ISI's DETER lab and the NSF GENI project. WAIL also hosts systems that are part of PlanetLab. WAIL is openly available for public. Since becoming generally available, it has been used by hundreds of researchers and students from all over the world in a wide variety of experiments. WAIL also hosts systems that are part of PlanetLab. WAIL is openly available for public. Since becoming generally available, it has been used by hundreds of researchers and students from all over the world in a wide variety of experiments.
- At present, general purpose computing and storage equipment in WAIL that is related to and available to the PREDICT project includes but is not limited to:
    - 220 Intel---based, general purpose, rack mounted computers configured with 1 --- 3.5 GHZ processors, 2---4 GB RAM, 35 --- 120 GB disks and 10/100/1000 Mbps Ethernet
    - 9 x 5.6 TB Apple RAID arrays
- There are a number of pieces of infrastructure that are fully dedicated to the Internet Atlas project including a high---performance computing engine with 10TB of storage that is used to host the Atlas repository and web server.
- The University of Wisconsin currently maintains three data sets for PREDICT: BGP updates, the DSHIELD firewall logs and Internet Atlas. The total storage required for these data sets is 3.0TB. The growth in storage needs is modest at about 200GB/yr. Thus the current infrastructure should be viable for the duration of the project.