



Government of the United States Virgin Islands
Office of the Governor

Bureau of Information Technology

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The 31st Legislature of the U.S. Virgin Islands

Committee on Finance & Budget

Bureau of Information Technology

Fiscal Year 2017 Budget Request

Presented by:

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Director/Chief Information Technology Officer

Bureau of Information Technology

Office of the Governor

Testimony

Good afternoon Honorable Chairman, Senator Clifford F. Graham, members of the Committee on Finance, other members and staff of the 31st Legislature, listening and viewing audience. My name is Reuben D. Molloy. I am the Director for the Bureau of Information Technology and Chief Information Technology Officer for the Government of the United States Virgin Islands. Also representing the Bureau of Information Technology is Mr. Cleveland Carbon, Deputy Director, Mrs. Hasina Harris, our new CFO, Mr. Mark Bough, Network Systems Manager, and Mr. Romel Wallace, Project Manager. We are here today to support the Bureau of Information Technology's Fiscal Year 2017 budget request. We plan to discuss the Bureau's Fiscal Year 2015 & 2016 Accomplishments, Fiscal Year 2016 Objectives, and the Fiscal Year 2017 Budget Request.

SCOPE & OVERVIEW

The Bureau of Information Technology (BIT) was created in 2003 by Act No. 6634 to develop a comprehensive technology strategy or framework for the Government of the United States Virgin Islands. This strategic framework supports and promotes the use of innovative technology solutions to improve the business of Government. The two major operational responsibilities for BIT as a central coordinating agency are to address Emergency Communication and Information Technology (IT) Infrastructure concerns within the Executive branch of the USVI Government.

FISCAL YEAR 2016 ACCOMPLISHMENTS & FUTURE PLANS

EMERGENCY COMMUNICATION INFRASTRUCTURE

From the emergency communications perspective, the Bureau of Information Technology is tasked with developing, maintaining, and enhancing the interoperable territory-wide public safety communications network. This network provides public safety professionals with the basic communication tools needed to provide quality services to USVI residents and visitors. The Bureau has two major initiatives. One initiative is the 911 Tower Site Enhancement Project which was initiated in June 2013. The project is projected to cost about \$4,000,000 to fully implement. The project goals are to eliminate the coverage gaps, eliminate network congestion, train users, and connect the two districts on one network. The Bureau is progressively working on identifying grant funding that if approved should fund a portion of the Project. In the interim, BIT has been in dialogue with entities such as the National Park Service in St. John, to combine forces for addressing 911 dead spots. BIT was also successful in securing a new tower site in Cotton Valley, St. Croix to improve coverage on the eastern end of the island. We have also established a new tower location in Fortuna which improves coverage in that area. While we have made some

progress implementing the tower site enhancement project, completion is still in the distant future.

The second initiative is the Territory's participation in the \$515,628 federally funded FirstNet State and Local Implementation Grant Program (SLIGP). The territory's participation in this program was mandated by Congress for the creation of a nationwide interoperable wireless broadband network that will enable police, firefighters, emergency medical service professionals, and other public safety officials to more effectively communicate and provide improved public safety services to our community. Our FirstNet project is progressing very nicely. We held several successful grant-funded outreach events territory-wide, convened the programmatic environmental impact statement town hall meeting and held monthly Interoperability governing board meetings as well as discussed the implementation of the Virgin Islands Public Safety Mobile Broadband Network Infrastructure in several different forums. The federal grant received in FY 2013 is available until FY 2018, of which 25% of the grant funding remains available.

INFORMATION TECHNOLOGY INFRASTRUCTURE

It is BIT's vision to digitize the government and create a paperless environment. It is our mission to, within the resources allocated, change the culture of computing within the Government of the United States Virgin Islands by leveraging innovative technology solutions to facilitate the business of government in a citizen centric environment.

Our goals are to:

1. Improve the Transparency of Government,
2. Improve the Efficiency of Government,
3. Increase the Revenue Generation Capacity of Government Agencies,
4. Reduce Overall Cost of Government Operations,
5. Improve Government Employee Engagement,
6. Improve Citizen Engagement, and
7. Improve the quality of life for residents and visitors to the USVI.

We accomplish our goals by utilizing four primary strategies: 1) Consolidation/Standardization, 2) Collaboration, 3) Clout, and 4) being a Change Agent. We have recently added an additional strategy and that is 5) Coordination.

The Bureau of Information Technology, uses this IT strategic framework to improve our operational efficiency, which enables us to progress along the infrastructure optimization continuum from a cost center, a necessary cost of doing business, to a business enabler, and ultimately be a strategic asset to our government agency and private sector partners. As a

strategic asset BIT is intimately involved with all government business initiatives having an IT component. We have prioritized working diligently with our stakeholders to establish an Information Technology (IT) infrastructure to facilitate efficient government business operations. The IT infrastructure is a critical strategic resource, as it enables departments and agencies to efficiently fulfill their public service mandates, and BIT has primary responsibility.

BIT provides helpdesk support and day-to-day technical assistance to departments and agencies. Our IT technical support team (3.5 Helpdesk Support Specialists and 2 Network System Managers) documented 116 requests for assistance during the month of May. While this number is not reflective of the true number of requests, it demonstrates we have a system in place to accurately document our activities. We are committed to improving the accuracy of our documentation.

We support a number of consolidated Information Technology service initiatives, to include, although not limited to, providing Project Management Office (PMO), enterprise email, office automation and collaboration, private cloud infrastructure (consolidated datacenter), faster, cheaper and more reliable broadband access through viNGN, and video conferencing bridge services to departments and agencies.

PROJECT MANAGEMENT OFFICE (PMO)

The Bureau of Information Technology provides Government-wide project management services through our Project Management Office (PMO). We provide this service to departments and agencies as a way to boost efficiency, cut costs, and improve on-time, on-budget, and excellent quality project delivery. BIT is currently managing, although not all inclusive, the following projects:

1. **BMV Operations Automation Project:**

The project allows for the upgrade of the Virgin Islands Driver License production system in compliance with the Real ID requirements, and for the upgrade of the Vehicle Registration System for residents of the Virgin Islands.

2. **DHS Enterprise Document Management Project:**

The project will allow the Department of Human Services to reach their goal of improved operational efficiency in digitizing their operations and creating a paperless environment by implementing a document management system. This initiative is scheduled to go live this week.

3. DHS Integrated Enrollment & Eligibility Project:

This ~ \$47,000,000 federally funded project will allow the Department of Human Services to install an integrated eligibility and enrollment system. BIT is providing project management, change management, process improvement, and IT infrastructure services for this project.

4. USVI Government Transparency Portal Project:

The project was implemented as a priority initiative for the Mapp Administration and in compliance with Act 7408, the Government Transparency Act. This initiative is a collaborative effort between OMB, the Department of Finance, the Attorney General's Office and BIT with oversight from Government House. We are pleased to announce that the Open Budget website, which represents the first phase in the roll out of the USVI Government Transparency Portal, went live June 1, 2016. The Transparency Portal will include the Open Budget, Open Expenditures and the Open Data websites.

5. SharePoint Utilization Project:

The project is a tool that allows departments and agencies to maintain a repository of documents for various projects as well as maintain data for day to day office operations. The OMB grants office used this platform to automate the USVI grants management function. OMB also used the platform to collect the information for this year's budget call. The platform is also used as the repository for project documentation.

6. BIR Comprehensive Tax Collection Solution:

This project seeks to automate tax collection processes.

7. Virgin Islands Virtual Information System Project (VIVIS)

This federally funded project is headed by the Department of Education. The purpose of the VIVIS System is to track students from Head Start through Death. It will provide important data that is necessary on all students of the Virgin Islands, which will enable policy decision makers to make data driven policy decisions.

8. Twin City Camera Project:

Collaboration with VIPD and St. Croix Foundation to install a video surveillance on St. Croix.

ENTERPRISE EMAIL

The Bureau of Information Technology provides the Government-wide enterprise email services by utilizing Microsoft's Office 365 Exchange Online cloud based solution. We have access to this solution via the \$1,000,000/year three-year Microsoft Enterprise Agreement that provides access to a list of Microsoft solutions. The agreement, which expires on September 30, 2016, provides licenses for 3,310 enterprise users, which is an increase from 3,200 users. Any additional users come at an additional cost. Because we are using 100% of the licenses, the Bureau of Corrections, for example, who did not come online until May 2015, paid \$22,935 for email and office automation and collaboration tools. To be proactive, we would need to purchase approximately 1,000 additional user licenses for a total of 4,310.

The upcoming three-year Enterprise Agreement will incorporate the cost of adding business continuity and disaster recovery measures. For cost not to be a barrier, the cost of adding these additional measures should be put into the Bureau's budget at a potential cost of \$1,962,485. This Service Agreement provides significant savings to the Government of the Virgin Islands. The service minimizes up-front costs and allows the Government of the Virgin Islands to budget more effectively by locking in pricing and spreading payments over three years.

OFFICE AUTOMATION AND COLLABORATION

Also, as part of the Microsoft \$1,000,000/year three-year Enterprise Agreement, the Bureau of Information Technology provides the Government-wide office automation and collaboration tools necessary for government employees to efficiently perform their assigned duties by utilizing the latest version of Microsoft's products. The Enterprise Agreement also includes access to a wealth of on-line training for users and IT professionals. The Division of Personnel has taken the lead on facilitating government employees accessing the Microsoft on-line training portal.

PRIVATE CLOUD INFRASTRUCTURE

The Bureau of Information Technology provides government-wide private cloud (datacenter) infrastructure services via a managed service agreement using VCE Vblock 340. BIT's cloud computing infrastructure delivers quantifiable business benefits to departments and agencies (See APPENDIX). This datacenter infrastructure reduces costs, and enhances service delivery time and quality since the Vblock Infrastructure Platform service is already purchased, deployed, and managed as a single unit by the Bureau of Information Technology. Installation of the infrastructure reduces total cost of ownership and shifts the focus of the traditional challenges of delivering IT server, storage, and network services within departments and agencies towards achieving the business objectives. The infrastructure is capable of meeting the evolving expectations of a tech-savvy mobile workforce.

In addition to providing centralized server and storage services for government agencies, the government cloud serves as the USVI Government's official disaster recovery/business continuity platform. The Bureau also leveraged the establishment of the USVI private cloud to host the following department's web presence: omb.vi.gov, dpr.vi.gov, energy.vi.gov, and firstnet.vi.gov. This system was configured to 25% of its capacity and currently hosts 133 active virtual servers. Ten agencies have a presence on the private cloud. Our goal is for all 33 executive branch agencies to have a presence. The cost of this managed service solution is \$14,711/month which annualizes to \$176,532. To accommodate this increasing demand for services on the private cloud, the Bureau is currently upgrading this solution to 75% capacity at a cost of an additional \$7,390/month (\$1,250 DOL, \$2,065 DOH, \$4,075 all others). This increases the cost of this solution to \$265,212 annually. The cost of increasing the private cloud infrastructure must be put into the Bureau's budget to ensure cost is not a barrier that jeopardizes the existing and critical planned services.

The service provides mission critical benefits to various departments and agencies. For example, the Department of Human Services is using 17 servers to run applications such as the federally mandated integrated eligibility and enrollment system on the government cloud. The value of resources being utilized for this agency is \$5,217.21/month or \$62,606.47/per year. Some other mission critical applications running in the datacenter include the Lieutenant Governor's Online Property Tax Payment system, the Division of Personnel's Health Insurance Database, the Department of Health's Immunization system, BIT's Avaya VoIP telephone system, and Polycom Video Conference, the Department of Human Services document management system and integrated eligibility and enrollment systems, and the most recent addition, the Bureau of Corrections SmartJail solution. In the very near future, the USVI Government's Official Financial System maintained by the Department of Finance will be hosted on our datacenter. Also, the Lieutenant Governor's office has begun the process of implementing a new system for Corporations and Trademark that will be housed in our datacenter.

This mission critical infrastructure asset has demonstrable value to the United States Virgin Islands Government. As stated earlier, there are ten (10) agencies with a presence on the government's consolidated datacenter. The value of the services those ten agencies are utilizing is \$338,586 per year. BIT is currently paying \$176,532 per year for those services. The difference between what we are utilizing verses what we are paying is \$162,053. Therefore, our return on investment is that \$162,053. Once we complete the upgrade our annual cost will be \$265,212 which is still \$73,374 less than our annual cost. In addition, as the presence in the datacenter increases from ten (10) agencies and approach thirty-three (33), and the number of solutions per agency increases, the greater the return for the Government as a whole.

VINGN BROADBAND BANDWIDTH ACCESS

The Bureau of Information Technology continues our efforts to facilitate the connection of all Executive branch agencies to the affordable high-speed broadband infrastructure managed by VI Next Generation Network (viNGN). To facilitate that process, the Bureau of Information Technology officially became a viNGN Internet Service Provider (ISP) for Executive Branch agencies. BIT has set a minimum bandwidth standard for the Government and sizing recommendation guidelines. That standard includes a 100 Mbps minimum for Government offices and 1000 Mbps for libraries and hospitals. The sizing recommendation is 6 Mbps per user at office locations.

BIT recently received a list of inactive community anchor institutions (CAI) from viNGN. The list contained ninety-nine (99) locations of which twenty-six (26) are Executive Branch agency locations. Of the twenty-six (26) Executive Branch agency locations, five (5) are already connected to viNGN. The Veterans Affairs is a very small agency with a very small budget who have historically received broadband services through BIT at no cost. BIT-ISP is in the process of connecting two (2) locations. Included in the twenty-six (26) are five National Guard locations whose technical lead decided to go in a different direction due to federal funding and security concerns. We are not revisiting that decision. Also, the Department of Education, who also decided to go in a different direction based on federal funding considerations, is not included in the twenty-six (26).

The process of transferring ISP services for Executive Branch agencies has been slow. However, BIT currently serves as an ISP for the Office of the Governor, Bureau of Corrections, Department of Agriculture, and the Department of Planning and Natural Resources. Some reasons for the delay include unexpired contracts with Private ISPs, designing departmental networks that connect all agency locations which could include non-viNGN CAI locations, and lack of staff. Nonetheless, BIT has facilitated the network migration and configuration of the Department of Human Services, Virgin Islands Fire Service, Department of Tourism, Bureau of Motor Vehicles, Department of Finance, Department of Public Works, Department of Justice, and the Lieutenant Governor's Office to the viNGN broadband infrastructure.

By connecting to the viNGN infrastructure, the Bureau of Information Technology has increased our accessible bandwidth from 90Mbps to 3000Mbps while decreasing our cost from \$18,860/month to \$10,140/month. Therefore, we have increased our bandwidth by 3,233% while decreasing our monthly cost by 46%. We are saving \$6,150/month which annualizes to a \$73,800 cost reduction. In support of leveraging the viNGN broadband infrastructure, we are actively promoting the leveraging of VoIP technology to establish a unified government-wide telephone

system, video conferencing, consolidated datacenter, private and public cloud based services, to name a few.

VIDEO CONFERENCING BRIDGE SERVICES

The Bureau of Information Technology provides video conferencing bridge services using Polycom's RealPresence Video Conferencing Platform. We have improved government-wide ability to cost effectively communicate and collaborate by implementing a high definition video conferencing bridge capable of hosting 45 concurrent connections. The video conferencing infrastructure we've established easily justifies its self. Fundamentally, it reduces the need for inter-island travel.

Nothing will ever replace the immediacy and impact of live interactions, but a large percentage of routine or regular business trips, with all their expense – transport to and from airport, flight, per diem expenses, salary of the time lost in traveling – can be reduced by communicating over video. Wherever video is added to a meeting, participants are more likely to stay focused, because they can be seen as well as heard. The result: decisions are made faster, projects completed sooner, and productivity increased across the USVI Government.

FISCAL YEAR 2016 OBJECTIVES

Operational efficiency can only be achieved by balancing the deployment of skilled people, streamlining processes, and introducing innovative technology solutions. We cannot continue to believe that we can cut our way out of our economic situation. We need to grow out of it.

The Bureau plans to continue carrying out our required mandates within the resources allocated. While we have exhausted our financial resources and are functioning at bare minimum, we will continue striving to accomplish more with less. Our approach to achieving our goals is focused on ensuring the Government of the United States Virgin Islands leverages the technological infrastructure we have established to maximize its benefits and achieve our collective and individual goals for Fiscal Year 2016.

Specifically, we plan to:

- Fulfill my responsibilities as Chief Information Technology Officer for the Government of the United States Virgin Islands,
- Officially implement a government-wide IT security program,
- Implement the Government Transparency Portal
- Facilitate all GVI agencies connecting to the viNGN 100% infrastructure,
- Make progress towards completing the Tower Site Enhancement Project (TSEP),

- Increase the use of the consolidated datacenter (vBlock),
- Connect all Executive Branch agencies to Office 365,
- Expand the use of Microsoft SharePoint as a collaboration tool,
- Expand the unified telephone system,
- Expand the video conferencing infrastructure,
- Expand a government-wide document management solution,
- Continue to collaborate with other government agencies with their various projects,
- Fulfill my responsibilities as the Statewide Interoperability Coordinator (SWIC),
- Fulfill my responsibilities as the FirstNet Coordinator, and
- Continue participation in the Virgin Islands Virtual Information System (VIVIS) project.

We are currently reviewing, costing and prioritizing our projects in order to focus on the items that are considered priority.

The Bureau of Information Technology could not have achieved this level of success without the continued support of the Governor and the Government House team, the Director of OMB and the Office of Management and Budget team, the Commissioner of Finance and his team, the Commissioner of Property & Procurement team, and the Attorney General and his team. In addition, BIT would not be successful without the support of our agency collaborators including but not limited to VITEMA, Personnel, DLCA, Human Services, Agriculture, Bureau of Internal Revenue and DPNR.

FISCAL YEAR 2017 BUDGET REQUEST

The Bureau of Information Technology's budget request for fiscal year 2017 is \$2,286,205. In addition, the Bureau is requesting \$3,387,783 in Fiscal Year 2017 under the Miscellaneous Appropriations, \$2,171,270 of which is to cover the cost of software licensing for Microsoft products, and the cost of implementing the USVI Government Transparency Portal, and \$1,216,513 is for maintenance costs and lease costs for tower sites territory-wide, including electrical cost and the cost for fuel for generators at fifteen (15) sites. This will bring our total budget request to \$5,673,988 as reflected in Exhibit 1:

EXHIBIT 1

FISCAL YEAR 2017 BUDGET	
FUNDING SOURCE	AMOUNT
GENERAL FUND	\$2,286,205
GENERAL FUND MISCELLANEOUS	\$3,387,783
TOTAL FISCAL YEAR 2017 BUDGET	\$5,673,988

PERSONAL SERVICES

The Bureau's Personal Services is to fund a total of 17 positions. The Bureau is requesting \$957,498. Currently the Bureau has 17 filled positions under the General Fund (ten in St. Thomas and seven in St. Croix): eleven (11) classified and six (6) unclassified. There are no vacant positions in the Bureau at this point. In addition, the Bureau has one (1) employee 100% federally funded under a State and Local Implementation Grant Program (SLIGP), awarded in Fiscal Year 2013. This employee's official duty station is on the island of St. Croix. Exhibit 2 below reflects a distribution of all General Fund positions by classification and status:

EXHIBIT 2

PERSONAL SERVICES BY CLASSIFICATION		
GENERAL FUND	COST	TOTAL NO. OF EMPLOYEES
UNCLASSIFIED		
FILLED POSITIONS-STT/STJ	\$282,000	5
VACANT POSITIONS-STT/STJ	0	0
FILLED POSITIONS-STX	97,000	1
VACANT POSITIONS-STX	0	0
TOTAL UNCLASSIFIED	\$379,000	6
CLASSIFIED		
FILLED POSITIONS-STT/STJ	\$226,969	5
VACANT POSITIONS-STT/STJ	0	0
FILLED POSITIONS-STX	274,358	6
VACANT POSITIONS-STX	0	0
TOTAL CLASSIFIED	\$501,327	11
OVERTIME PAYMENTS	\$30,606	
LUMP SUM PAYMENTS	\$46,565	
TOTAL PERSONAL SERVICES	\$957,498	17

FRINGE BENEFITS

The Bureau is requesting \$385,105 in Fringe Benefits to cover the cost of Social Security, Medicare taxes, Employer's Retirement Contribution, Health Insurance Premiums, and Workers Compensation Benefits for its current and proposed work force.

SUPPLIES

The Bureau is requesting \$38,000 for Supplies, of which \$20,000 is for Office Supplies, \$6,000 for Operating Supplies, \$10,000 for Vehicle Supplies, and \$2,000 for Small Tools and Minor Equipment.

OTHER SERVICES

The Bureau is in need of \$669,102 for other services as delineated in Exhibit 3 below:

EXHIBIT 3

ALL OTHER OPERATING EXPENSES	
ACCOUNT TITLE	AMOUNT
COMMUNICATIONS	\$215,000
RENTAL OF LAND/BUILDING	214,600
PROFESSIONAL SERVICES	183,922
REPAIRS & MAINTENANCE	20,000
AUTOMOBILE MAINTENANCE	10,000
TRAVEL	10,000
BULK TICKETS	7,000
TRANSPORTATION NOT TRAVEL	5,000
RENTAL OF MACHINES & EQUIPMENT	2,080
SECURITY SERVICES	1,500
TOTAL	\$669,102

PUBLIC UTILITY SERVICE

The Bureau is requesting \$181,500 for public utility services, \$176,500 of which is to cover the cost of electricity. This is an area of concern for the Bureau, since the installation of the private cloud. Additionally, \$5,000 is being requested to cover the cost of water.

CAPITAL OUTLAYS

The Bureau is requesting \$55,000 for Machinery and Equipment for the purchase of a vehicle.

The Bureau respectfully requests a lump sum appropriation budget in order to effectively manage and move funds from one category to another category given the unique circumstances that occur on a daily basis. We maintain and operate the Territory's mission critical emergency communications infrastructure that supports the territory's 911 call centers.

In conclusion, I would like to thank the seventeen (17) hard working committed team members at the Bureau of Information Technology without whom none of our accomplishments would be possible. And specifically commend Mr. David Parris and Mr. Jesus Caban our employees of the year. I am proud to be a member of the BIT team. Thank you, Finance Committee Chair Senator Graham and the other members of the 31st Legislature for giving us this opportunity to testify on the Bureau's budget request for FY 2017. I trust that you will give the Bureau your continued support. My staff and I are available to answer any questions you, members of the Finance Committee and other Senators may have with respect to the Fiscal Year 2017 budget request I have presented today.

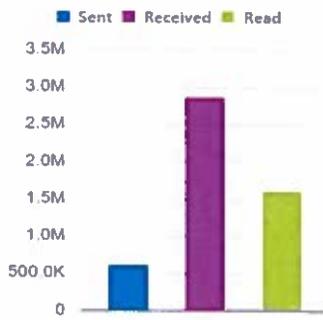
APPENDIX

AGENCY TOTALS ON VBLOCK SERVERS

Agency	# vServer	vCPUs	CPUs (GHz)	Memory (GB)	Virtual Disk Space (GB)	Disk Space Total Used (GB)	Total
BIR	6	18	50.4	72	2,730	62.7	\$18,880.10
BIT	81	235	664.7	581	12,186	7,621.5	\$180,457.86
BMV	2	3	8.7	16	1,045	588.21	\$4,209.00
BOC	2	10	28.8	48	1,524	1,574	\$11,440.92
DHS	17	54	150.6	268	8,016	6,454	\$62,606.47
DOF	1	1	2.9	4	380	151	\$1,277.23
DOH	6	20	55.6	96	1,100	1,209	\$20,933.84
DOP	4	12	33.6	37.5	552	307	\$10,078.90
LGO	13	35	98.9	108	3,170	1,174	\$27,624.42
PERB	1	1	2.9	4	180	81	\$1,077.23
Grand Total	133	389	1097.1	1234.5	30,883	19,222.41	\$338,585.97
						Annual Cost to BIT	\$176,532.00
						ROI	\$162,053.97

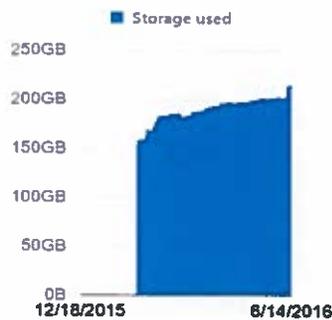
OFFICE 365 STATISTICS (LAST 180 DAYS)

Email activity
3.5M



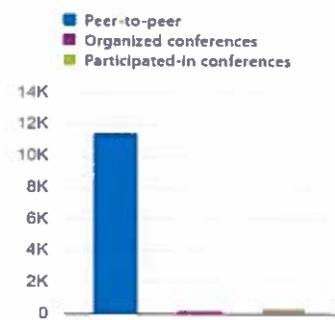
Active users - 1826 of 3464

OneDrive files
75.4K



Active sites - 309 of 1508

Skype activity
12.0K



Active users - 248 of 3465