

STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
 DF-46 (REV 08/15)

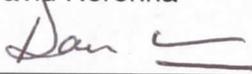
Fiscal Year FY 2016-17	Business Unit 0845	Department California Department of Insurance	Priority No. SO - 3
Budget Request Name 0845-005-BCP-BR-2016-GB		Program 9900100 - Administration 9900200 - Distributed Administration	Subprogram

Budget Request Description
 CDI Network Switch Replacement

Budget Request Summary

The California Department of Insurance (CDI) is requesting a one-time Special Fund expenditure authority increase in Fiscal Year (FY) 2016-17 of \$1,669,000. This increase will support the replacement of 95 information technology (IT) network switches necessary to keep CDI's network systems up and running and protected against cyber threats.

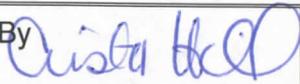
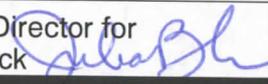
Requires Legislation <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed
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Does this BCP contain information technology (IT) components? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, departmental Chief Information Officer must sign.</i>	Department CIO David Noronha 	Date 12/14/15
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For IT requests, specify the date a Special Project Report (SPR) or Feasibility Study Report (FSR) was approved by the Department of Technology, or previously by the Department of Finance.

FSR SPR Project No. _____ Date: _____

If proposal affects another department, does other department concur with proposal? Yes No
Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Ryan Whalen	Date 12/14/15	Reviewed By Crista Hill 	Date 12/14/15
Department Director for Erika Sperbeck 	Date 12/14/15	Agency Secretary N/A	Date

Department of Finance Use Only

Additional Review: Capital Outlay ITCU FSCU OSAE CALSTARS Dept. of Technology

BCP Type: Policy Workload Budget per Government Code 13308.05

PPBA	Original signed by Jeff Carosone	Date submitted to the Legislature 1-7-16
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DEPARTMENT OF FINANCE
COR/JUD

BCP Fiscal Detail Sheet

BCP Title: CDI Network Switch Replacement

DP Name: 0845-005-BCP-DP-2016-GB

Budget Request Summary

	CY	BY	BY+1	FY16 BY+2	BY+3	BY+4
Operating Expenses and Equipment						
5346 - Information Technology	0	1,669	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$1,669	\$0	\$0	\$0	\$0
Total Budget Request	\$0	\$1,669	\$0	\$0	\$0	\$0

Fund Summary

Fund Source - State Operations						
0217 - Insurance Fund	0	1,669	0	0	0	0
Total State Operations Expenditures	\$0	\$1,669	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$1,669	\$0	\$0	\$0	\$0

Program Summary

Program Funding						
0535 - General Fund Tax Collection and Compliance	0	10	0	0	0	0
0520010 - Rate Regulation	0	191	0	0	0	0
0520019 - Regulatory	0	211	0	0	0	0
0520028 - Licensing	0	223	0	0	0	0
0520037 - Special Programs	0	81	0	0	0	0
0525010 - Legal Compliance	0	86	0	0	0	0
0525019 - Investigations	0	148	0	0	0	0
0525028 - Consumer Services and Market Conduct	0	257	0	0	0	0
0530010 - Fraud - Auto	0	193	0	0	0	0
0530019 - Fraud - Workers' Compensation	0	212	0	0	0	0
0530028 - Fraud - General Assessment	0	26	0	0	0	0
0530037 - Fraud - Disability and Healthcare	0	31	0	0	0	0
9900100 - Administration	0	1,669	0	0	0	0
9900200 - Administration - Distributed	0	-1,669	0	0	0	0
Total All Programs	\$0	\$1,669	\$0	\$0	\$0	\$0

Analysis of Problem

A. Budget Request Summary

The California Department of Insurance (CDI) is requesting a one-time Special Fund expenditure authority increase in Fiscal Year (FY) 2016-17 of \$1,669,000. This increase will support the replacement of 95 information technology (IT) network switches necessary to keep CDI's network systems up and running and protected against cyber threats.

B. Background/History

The CDI licenses over 380,000 individuals and business entities. In addition, CDI regulates the California insurance market. Insurers collect \$257 billion a year in premiums in California, making it the nation's largest insurance market. The Department has approximately 1,400 employees located in one of the three headquarter offices in Los Angeles, Sacramento and San Francisco, or one of the nine regional offices located throughout the state. CDI's IT networks connect all employees regardless of location to email and applications such as CDI Menu, Integrated Database (IDB), and Fraud Integrated Database (FIDB); provides video conferencing, Internet access, statewide Voice over Internet Protocol (VoIP) telephone system services (including two statewide call centers); and provides secure access over the Internet to CDI applications for licensees, consumers, insurance companies, partners and stakeholders.

CDI's existing network infrastructure has not been significantly upgraded for over a decade and only incremental upgrades have been performed since initial set-up. As technology has changed and CDI's needs have grown, additional equipment purchases have been made, incrementally adding to the overall size and complexity of this network. A central component of CDI's network are 95 IT network switches that serve as an access point to a private cloud that connects the entire organization to the Internet. In July 2016, the 95 IT network switches will reach the end of their life as earmarked by the manufacturer. As the end-of-life approaches for these network switches, the failure rate increases to approximately 25 percent.

C. State Level Considerations

Keeping CDI's IT network infrastructure technology current and supportable is consistent with CDI's Strategic Plan to provide excellent, fair and responsive services; advance effective and efficient business processes; value resources and use them wisely; and promote innovation to provide insurance protection for all Californians. Additionally, it is consistent with several of the California Department of Technology's (CDT) Strategic Goals to serve Californians in a way that is convenient, efficient, and economical. The goals that apply to this project include the following:

Goal 1: Responsive, Accessible, and Mobile Government

Goal 3: Efficient and Reliable Infrastructure and Services

Goal 4: Secured Information

D. Justification

As technology continues to grow rapidly so are the needs of CDI's network infrastructure. Over the years additional equipment purchases have been made, incrementally adding to the overall size and complexity of this network. All of CDI's network systems are dependent on these 95 IT network switches to run. Without these network switches the computers and phones would fail to work. Failure of these switches would result in users being unable to access network resources such as email and internet thus impacting daily tasks. When switches fail there is downtime for the staff while equipment is being purchased, decreasing productivity. Additionally, replacing switches one by one as they fail creates compatibility issues between newer switches and older switches leaving gaps between newer higher performing switches and the older switches. When newer technology is interfaced with older equipment it becomes necessary to "dumb down" the new equipment to match the old and would slow CDI's applications, causing an inconvenience to CDI system users. When technology and/or equipment is "dumbed down" there is a loss of desired features, not leveraging the full potential of the investment, or compromising on security or other important patches. Purchasing switches on an as needed basis due to failure would also be more costly in the long run. By replacing all 95 network

Analysis of Problem

switches, all staff tools such as computers and phones will have safe and reliable access to the program systems and databases. Existing technology refresh funds were not intended to cover the expense of replacing major CDI infrastructure such as network switches.

The 95 IT network switches will reach end-of-life and support by July 2016. In order to maintain existing mission critical services it is critical these switches be replaced. As such, CDI is seeking \$1,669,000 in expenditure authority to purchase and replace 95 network switches. These costs include a three-year maintenance and support plan. The switches have a useful life of about six years; therefore, CDI anticipates requesting additional funding in FY 2019-20 of approximately \$325,000 to purchase three more years of maintenance and support. This will take the department out six years and to the end of life for these replacement switches. In addition, with cyber-security risks at an all-time high, CDI needs to ensure that the network systems are as secure as possible. This is another reason why it is critical to keep the systems running and avoid network outages caused by switch failures.

By replacing the 95 IT network switches, the network will be capable of supporting the necessary features and protocols to ensure full compatibility, thus providing maximum cyber-security. Without the approved funding needed to complete the replacement of these switches, CDI will face network failure that will put staff productivity at a standstill and leave the CDI network unsecured.

Note: A Stage 1 Business Analysis was not required in accordance with State Administrative Manual Section 4819.40.

E. Outcomes and Accountability

Replacement of the 95 IT network switches will provide reliable services, features and network protection to existing as well as future systems. After installation of the new switches there will be no need for replacement for at least six years, which is consistent with a network switches life cycle.

The expected outcome includes improved network availability and lower costs. Other benefits expected include:

- Lower support costs due to a decrease in reactive support issues.
- Lower network costs due to device, circuit, and user tracking tools and processes that identify unused network components.
- Improved network availability due to a decrease in reactive support costs and improved time to resolve problems.
- The 95 IT network switches will be configured to provide scalability for future systems by following best practices.
- Simplified network administration: Use a single management interface for the network administrator. This simplifies the setup and operation of the network.
- Deployment flexibility: the IT network switches will operate together with other switches or they can operate independently. Units one day can be used in a single site, and later can be run in different locations as independent switches.
- Resilient connections: The architecture will allow active connections to be spread across multiple units so that should one unit be removed or fail, data will continue to flow through other units that remain functional.

As this technology upgrade will impact all of the CDI's businesses, the success of the system will be measured by the uptime and the system being available for not only the CDI staff but the insurance industry and California consumers who access CDI's Internet website. If the network is not operational, CDI will not be able to effectively provide mission critical services to insurers and consumers. The proposed replacement of

Analysis of Problem

switches will provide the CDI with a network that is functional and efficient, using the latest hardware upgrades and technological updates.

F. Analysis of All Feasible Alternatives

Alternative #1 - Approve proposal as requested.

Pros:

- The network will be capable of supporting the same features, cyber-security levels, and protocols to ensure full compatibility.
- Maximum cyber-security will be in full effect.
- Avoids system failures that can lead to unnecessary amounts of business downtime.

Cons:

- Increased IT staff workload as new equipment is installed.
- Creates additional costs for CDI with no dedicated revenue stream.

Alternative #2 – Replace the 95 (47 in FY 2016-17 and 48 in FY 2018-19) IT network switches over two fiscal years.

Pros:

- The cost of the replacement would potentially be easier to fund over two fiscal years.
- Provides improved cyber-security for CDI's network infrastructure.

Cons:

- Replacing the 95 IT network switches in phases is not feasible as the technology must all be capable of supporting the same features, cyber security levels, and protocols to ensure full compatibility.
- IT staff will have to maintain the increased workload over a two year period taking away attention to everyday duties.

Alternative #3 – Approve requested funding with the addition of an IT assessment to offset expenses.

Pros:

- Provides a dedicated revenue source for IT infrastructure and cyber-security enhancements.
- The network will be capable of supporting the same features, cyber security levels, and protocols to ensure full compatibility.
- Maximum cyber-security will be in full effect.
- Avoids system failures that can lead to unnecessary amounts of business downtime.

Cons:

- The approval will increase the IT staff workload as new equipment is installed.
- Increased costs passed on to insurers through a new IT assessment.

Analysis of Problem

Alternative #4 – Deny the request.

Pros:

- No increase costs to CDI.
- There will be no additional workload to CDI's IT staff to install new equipment.

Cons:

- CDI's infrastructure will continue to consist of critical, network switches that are old and past end of life; thereby, increasing the risk of system downtime due to switch failures.
- CDI loses the opportunity for new product features.
- CDI does not have access to the most current security or other important patches.
- There is a heightened risk of cyber-attacks with outdated technology.

G. Implementation Plan

July 2016 - the procurement document(s) will be released. Upon the receipt of the equipment the ITD technical staff will begin installing, testing, and deploying network switches at each site.

October 2016 – installation will be completed.

H. Supplemental Information

Hardware (including 3 years of maintenance) - \$1,669,000

I. Recommendation

Alternative 1 - This is the only alternative that allows CDI to replace 95 IT network switches in FY 2016-17. By replacing all 95 switches at the same time, there will be minimal impact on the services provided to CDI employees, the insurance industry, and California consumers. The current network switches will reach end-of-life in July 2016 and without replacing all 95 switches at the same time, CDI will more than likely experience network failure, heightened cyber security risk, a less than standard network infrastructure that is obsolete and will never perform at the rate of current technology and increased costs as switches are replaced on an emergency basis.