## Governor Patrick Announces Funding to Launch Massachusetts Open Cloud Project Celebrates Release of 2014 Mass Big Data Report

State's first big data industry status report finds 3,000 new Big Data jobs in Massachusetts over the course of the next year

HOLYOKE – Friday, April 25, 2014 – Governor Deval Patrick today announced a \$3 million capital investment to launch the Massachusetts Open Cloud project, a university-industry collaboration designed to create a new public cloud computing infrastructure to spur big data innovation. Governor Patrick also announced the release of the 2014 Mass Big Data Report, which confirms the continued growth and competitiveness of the Commonwealth's big data industry.

"Massachusetts' competitive edge lies in our exceptional academic institutions, cutting-edge private companies, highly-skilled workforce and above all our willingness to work together to address the increasing demand for big data solutions," said Governor Patrick. "Massachusetts is already home to several unique big data assets, including the Massachusetts Green High Performance Computing Center in Holyoke, and through continued investments and support for this growing industry we are positioning ourselves to take the lead on Big Data."

Today's announcements, made at the Massachusetts Green High Performance Computing Center (MGHPCC) in Holyoke, mark two important milestones in Governor Patrick's Mass Big Data Initiative.

Announced in May 2012, the Initiative aims to leverage and expand the Commonwealth's position as a global leader in the rapidly growing big data sector. Big Data is the collection and analysis of large amounts of data, a growing information technology need as companies seek solutions to easily handle data across a broad spectrum of industries and uses such as genomics, climate change, cancer research, health care cost reduction, smart grids and other topics.

The \$3 million investment for the Massachusetts Open Cloud Project announced today serves as the first investment from the Collaborative Research and Development Matching Grant Fund, a fund created as part of the <a href="2012 Economic Development Bill">2012 Economic Development Bill</a> that serves as a competitive lever to expand innovation capacity, and is administered by the Innovation Institute and the Massachusetts Technology Collaborative.

"Investing in innovative sectors that are becoming a prominent part of our economy is critical to meeting the demands of the 21st century global economy," said Housing and Economic Development Secretary Bialecki. "We know that the demand for Big Data is growing, and by continuing to invest in this innovative sector we are ensuring a strong economic future for our Commonwealth."

The Massachusetts Open Cloud Project is a collaboration that draws from all five MGHPCC Universities, including overall project leadership from Boston University, operational leadership from Harvard University, development leadership from Northeastern University, community building from MIT and related research by faculty from the University of Massachusetts, Boston University, Northeastern University, Harvard University and MIT. Industry partners, including Cisco, EMC, SGI, Red Hat, Juniper, Canonical, Dell, Intel, Mellanox, Brocade, DataDirect Networks, Mathworks, Plexxi, Cambridge Computer Services, Enterprise DB and Riverbed are contributing engineering and operational talent, equipment, financial support and business guidance. The hardware platform for the Massachusetts Open Cloud will be housed at the MGHPCC. "The Massachusetts Open Cloud project is just the kind of collaboration envisioned with the conception of the MGHPCC," said Mel Bernstein, President of the MGHPCC and Vice Provost for Research and Graduate Education at Northeastern University. "The project brings government, academia and industry together in a way that promises to accelerate technological innovation while creating economic opportunity for Massachusetts."

"Boston University is proud to be leading the development of Massachusetts Open Cloud and we are grateful for the Commonwealth's support," said Gloria Waters, Vice President and Associate Provost for Research at Boston University. "Through this initiative with the state and our partners in industry and academia, the MOC will be the first public open cloud platform designed to spur collaboration, drive innovation and economic development in Massachusetts, catalyze major research projects, and serve as a new model in cloud computing and big data. Ultimately, the Massachusetts Open Cloud aims to become an invaluable, self-sustaining R&D resource for the Commonwealth."

The 2014 Mass Big Data report underscores the strong collaborations among industry, academia and government. The report outlines the prospects for growth in areas such as talent, workforce and public data access, and identifies opportunities to promote and expand the big data sector, enhancing the Commonwealth's position as a global leader. Overall, the report finds that the global big data market is expected to top \$48 billion by 2017, up from \$11.6 billion in 2012. While hardware and services are expected to continue to account for the greatest share of revenue, the fastest growing sector is likely to be in big data-enabled applications. Locally, big data applications in healthcare, life sciences and financial services appear highly promising, and local firms are hiring rapidly, seeking to fill as many as 3,000 big data-related jobs in the region over the next 12 months.

"Investment in the Massachusetts Open Cloud will help keep our Commonwealth at the forefront of big data research nationally, expanding opportunities for innovators to build advanced cloud computing solutions," said Pamela Goldberg, CEO of the Massachusetts Technology Collaborative. "As cited in the 2014 Mass Big Data Report, we must continue developing cross-sector collaborations like the Massachusetts Open Cloud, in order to spur innovation and foster industry growth."

The report also recommends action priorities for strengthening the Commonwealth's competitive position, including:

- Strengthening opportunities for data science education and training;
- Increasing regional talent retention and industry recruiting success:
- Expanding access to open and public data;
- · Increasing awareness of the strengths, assets and big data leadership in the Commonwealth;

- Accelerating regional innovation by supporting collaborations within the Mass Big Data ecosystem; and
- · Increasing awareness of and local applications for federal grant opportunities

"Through community-powered innovation, open source technologies offer significant advantages in the cloud, demonstrating industry-leading innovation, flexibility and scalability," said Jim Totton, vice president and general manager of the platform business unit at Red Hat. "OpenStack in particular, which is the massively-scalable backbone of Massachusetts Open Cloud, is an ideal example of the transformative power of open source in the cloud, and for big data sets. I expect Massachusetts Open Cloud to drive new cloud computing use cases, and Red Hat is thrilled to collaborate with the Commonwealth of Massachusetts and its partners to deliver a marketplace that enables more agile development and application delivery based on an open hybrid cloud infrastructure."

"Juniper is committed to providing the Massachusetts Open Cloud project with cutting-edge networking platforms and software tailored for big data computing environments to support the state's collaborative research projects across its industry and academic institutions," said Dean Sheffield, global managing director for cloud networking solutions at Juniper Networks. "By contributing simple, secure, open and intelligent networking architecture to build the data center for the MOC, Juniper will enable local organizations to develop and deploy cloud-based technology with the speed and agility required for big data applications."

"Mellanox is pleased to support the new HPC Open Cloud initiative and are happy to provide the center with the industry's fastest and most efficient interconnect solution," said Gilad Shainer, vice president of marketing at Mellanox Technologies.

Earlier this month Governor Patrick filed <u>An Act to Promote Growth</u> <u>and Opportunity</u> which designates \$2 million to fund paid internships for students seeking careers in technology and innovation industries to work with the companies competing in these fields. The legislation tools and training so our workforce is prepared to meet the needs of employers, invests in our Gateway Cities to promote economic

development across the entire state, and provides incentives to create jobs and stimulate the economy. This bill furthers the Administration's proven growth strategy of investing in education, innovation and infrastructure that has led to record job creation in Massachusetts and has made the Commonwealth a global leader in key innovation economy sectors.

To read more about the 2014 Mass Big Data Report, click <a href="here">here</a>, or to learn more about the Mass Big Data Initiative, click <a href="here">here</a>.