Research Computing Support

Research Computing Services (RCS) at NYUAD is a set of services that supports researchers use of IT as an enabler for their research activities. We have adapted our services to meet and satisfy researchers' and faculty changing research and teaching needs. Members of our team engage researchers and faculty across all academic divisions, centers and institutes at NYUAD. We provide Research Application Hosting, Professional Services, and Research Lab Support Services.

Professional Services
Research Computing support researchers with their IT requirements and help researchers identify the best solutions to fit their needs by providing the following professional services.

<table>
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<tr>
<th>Hosted Services</th>
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<tr>
<td>Source Control (GitHub)</td>
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<td>Hadoop</td>
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Research Grant Support
— Helping researchers prepare grant applications by providing technical assistance in identifying the requirements, IT equipment budgeting, and lifecycle management throughout the project's lifecycle.

Scientific Application Support
— Helping researchers select applications based on research requirements and assisting them with purchasing, installation, configuration, benchmarking, updating, and usage training where possible.

Application Hosting
Research Application Hosting consists of a fully managed environment for your research applications and comprises of the following services.

<table>
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<tr>
<th>Network Storage</th>
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<td>— Provision of a local network share to a specified size for research use, consists of monitoring, backup, maintaining, and managing space of the shared storage.</td>
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<th>Co-location</th>
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<td>— Provides a stable, secure physical environment for the location of the researcher's server environment with protected power, fire suppression, and basic internal network connectivity to NYU-NET.</td>
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<th>Managed Server</th>
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<td>— Provides the deployment of OS and day to day management of the server environment that consists of monitoring.</td>
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Lab Support Services
Support in transitioning researchers hardware and applications into the NYUAD environment.

Transitioning
— Provide support in transitioning researchers hardware and applications into the NYUAD environment.

An example would be a Researcher not based in Abu Dhabi, wants to relocate their research group to NYUAD. We can help plan their new IT requirements and how they will be hosted / connected in the AD infrastructure while maintaining connectivity to external resources such as archived data and logs etc.

Integration

Contact Us
For further information on NYU Abu Dhabi Research Computing Support, contact:

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Training
— We offer regular orientation courses and application-specific sessions for small groups, or one-to-one sessions, on an as-needed basis.

Programming and algorithm development and support
— Research Services will assist researchers in algorithm and application development and serial-to-parallel conversion of applications.

Data Analytics / Data management
— Provide guidance on data and analytics algorithms and datasets to support the research.

Provision of additional IT services outside of NYUAD
— Negotiation, specification and provision of IT services outside of the NYUAD infrastructure e.g. Connection to other research networks, facilitating access to hadoop cluster.

backups, maintaining, and managing hardware and system software configurations.

Managed Network
— Provision of access into the NYU-NET infrastructure to which the server environment is connected, advanced configuration and monitoring of utilization and traffic to the server.

Managed Storage
— Provision of skills and expertise to manage the researcher’s storage array, consists of monitoring, backup, maintaining, and managing space of the storage array, alerting when capacity projections are above agreed limits.

Managed Application
— Installation, configuration, and support of the researcher’s applications on a managed server platform with database and storage configured and optimized for the application.

Showcase
An example for supporting Lab support services will be the implementation for Corelabs Technology Platform for ERB.

Core Technology Platform consists of the following
• Scheduling System
• Screenlock
• Fileshare

The Core Technology Platforms Scheduling System, CTPSS, is a web-based reservation and scheduling system, allowing users to reserve core equipment for certain period of time.

The website can be reached at http://corelabs.abudhabi.nyu.edu

Most of the equipment in the CTPs are protected by a screen lock that appears on the PC monitor. The screen can be unlocked by using netid/password if there is a valid booking created through CTPSS scheduling website.

File share provides a repository for saving files from equipments which can be later accessed for copying to their workstation/laptops.