Google for Education

Guide to recruiting partners

This document contains guidelines for selecting a partner to help with deploying, training and integrating a Google Apps deployment and to help with any infrastructure projects. The guidelines are based on best practices, but you may have different requirements.

There is a document that will help you to assess potential partners which you can download from the Google for Education site: "Assess the capability of your Partner".

You may need a partner to help with:
- **Tools** - deploying and integrating the Google Apps for Education Solution (Email, sheets, docs etc.)
- **Skills** - providing training to administrators, staff and students
- **Access** - improving your infrastructure (internet bandwidth, network infrastructure, wifi)

Tools partner

You can search for Google Apps for a Business deployment partner here:
http://www.google.com/a/partnersearch/#home or on the Community page of the Google for Education site.

A tools partner is recommended to have experience in:
- Google Apps for Business / Education deployment
- Web hosting, domain configuration and MX records
- Migration of legacy email data including its scripts and other related processes development
- Account provisioning
- Google Apps APIs
- Google Apps Directory Sync
- Dual delivery with Google Apps Mail (e.g. support both MS Exchange and Google Apps Mail on the school domain at the same time)
- Single Sign On (SSO) development and integration with existing school systems e.g. SSO integration with Learning Management Systems (LMS) such as Moodle
- Security configuration for Google Apps (eg. security, spam, access control of Google Apps)

In addition, a tools partner should meet these requirements:
- Successfully deployed Google Apps for at least 1,000 users
- IT service company with at least 2-4 years of experience
- Proven experience in managing technical projects
- Google Apps Deployment Certified
- Google Apps for Education Certified
- Google Apps reseller-is a plus

For Integration work, you will need a partner with skills like:
- Integrating Google Apps into school/university systems, processes and initiatives; such as:
  - e-learning
  - student portal (including clubs and societies)
  - academic portal
  - assessment
  - payroll
  - resources booking
  - academic calendar
  - going paperless

- - assessments
  - thesis progress monitoring
- Google Apps APIs
- Google Apps Scripts
- SSO development and integration with existing school/university systems (e.g. SSO integration with LMS such as Moodle)
- Security configuration for Google Apps (eg. security, spam, access control of Google Apps)

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Skills partner

Training

A Google Apps professional development (or training) partner will have staff with the following qualifications:
- Google Educator (Level 1)
- Google Education Trainer (Level 2)
- Google Certified Teacher (Level 3)
- [Google Apps Education Qualified Individual](#)
- [Google Apps Education Certified Trainer](#)

The Certified Teacher is the higher qualification

Learning development

A Google Apps professional learning development partner should have training and curriculum development experience in:
- Basic Google Apps Usage in Classroom (this includes classroom examples of Gmail, Drive, Docs, Forms, Sheets, Slides, Drawing, Sites, Calendar, Hangouts, Groups and other Google products)
- Google Sites as a Learning Management System and e-Portfolio
- Integrating Google Apps into the curriculum, eg. how to teach Physics using Google Apps and other Google products
- Integrating Google Apps into school/university systems, processes and initiatives; such as:
  - e-learning
  - student portal
  - academic portal
  - assessment
  - payroll
  - resources booking
  - academic calendar
  - going paperless
  - assessments
  - thesis progress monitoring

In addition, it is preferable for a Google Apps professional development partner to have training and curriculum development experience in these topics:
- Digital Literacy - Online material:
  - http://www.google.com/goodtoknow/web/curriculum/
  - http://www.google.com/edu/tools-and-solutions/index.html#digital-citizenship
- Google Apps Admin Panel
- Google+ Usage for Schools
- Apps Scripting and Apps APIs

System administration (technical training)

You may want to upgrade the skills of your IT team, A technical training partner will provide a deeper technical understanding. You can refer to the ISOC Workshop site (http://ws.edu.isoc.org/) for online materials.

For System Administration, a technical training partner is recommended to have expertise in:
- Linux or BSD overview
- Systems resources management
- Network file system management
- Shell scripting and system automation
- TCP/IP configuration and troubleshooting

- OpenLDAP configuration

For Network Services, a technical training partner should have expertise in:
- Configuring DNS and DHCP services
- Configuring HTTP, file and similar servers
- Configuring and scaling a Web Cache (Squid)
- Setup of scalable database servers
- Configuration management and server monitoring

For Network Infrastructure, a technical training partner should have expertise in:
- IPV4 + IPv6 addressing/subnetting
- Basic routing
- Dynamic routing with OSPF and BGP
- Firewalls, intrusion detection and content filtering
- Router management
- Peering and Exchange points
- Network Security

For Campus Network Design, a technical training partner should have expertise in:
- Physical cabling infrastructure
- In-building network design - best practices in Wireless infrastructure and topology
- Radio link calculation, budgeting and planning
- Power management
- Out-of-band access

For Network Monitoring and Management, a technical training partner should have expertise in:
- Network Operations (NOC) and Documentation
- Introduction to SNMP
- Configuration management with RANCID
- Availability monitoring with Nagios or similar tools
- Performance monitoring with Cacti/Smokeping or similar tools
- Logging with Syslog
- Ticketing System RT or similar tools
- Netflow

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Access partner

There are different types of Access partner you may need.

Bandwidth partner

A bandwidth partner is necessary when your organization needs to bring capacity or connectivity to the campus. It should be an Internet Service Provider or a telecommunication company with expertise in:
- Designing, deploying and configuring Internet Access routers
- Doing the associated civil works from the ISP Point of Presence (PoP) to the school/university central IT room.
- Managing bandwidth delivery to pre-negotiated SLA's

Campus/Cloud WiFi partner

A campus wifi partner is necessary when your organization wants to implement Google's Cloud WiFi solution. It should have expertise in:
- Radio Frequency planning & design
- Civil work (Switching & Cabling)
- System Integration
- Linux
- Network TCP/IP address planning, configuration and documentation
- Network management system installation, configuration and documentation
- Google OAuth APIs

Access Technical Consultancy Partner

An access technical consultant is necessary when your organization needs to assess the existing infrastructure, improve efficiency of the network etc. It should have expertise in:
- Access (Wireless & Wired) network design
- Backhaul design (Fiber, WiFi and Microwave)
- Network Management & Monitoring tools
- Security (Firewalls & Intrusion detection systems)