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](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 (e.g., security, spam, access control of Google Apps)
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/
- 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
**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)