# Solution Design

**Current Offerings** 

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## 1 Description

#### 1.1 Design solutions

We provide a service for Customers to design solutions based on their requirements that we first establish and document with them. Our design process involves:

- a) Agreeing requirements
- b) Providing a proposal for agreement.
- c) Contracting for the service in accordance with a master agreement put in place when you engage us.
- d) Delivering and installing the solution.
- e) Managing it under a support agreement.

This service covers the development of solutions that comprise predominantly Commercial Off the Shelf (COTS) hardware and software, potentially including the development of integration software or implementation of existing third-party integration.

Such integrations might include the extraction of data via an existing API and the injection of extracted data into another platform such as a management reporting dashboard.

Our Service includes the design, procurement of COTS products, documenting the installation and configuration of those products, development of any required integrations between solution components or any other element of a customer's systems. These integrations would typically be pre-defined integrations that can be exploited through configuration without the need for bespoke software development.

For a project to be offered as a solution we would expect the bespoke element to be less than 10% and definitely no more than 25% of the overall cost.

Where more complex integrations are required or where the cost of a project includes significant bespoke software development, we would seek to deliver that under our Software Development Service.

#### 1.2 Existing customers

For existing customers, we may be able to identify complete COTS solutions provided by one or more third-party vendors where the level of bespoke design is very limited, in which case our work as part of this service might be limited to:

- a) Assisting you in the procurement process.
- b) Carrying out detailed analysis of the offered solutions to verify that they are sufficiently robust and can be deployed in a secure manner into your infrastructure.
- c) Carrying out a risk assessment and helping you to develop a business case for the options available to you.
- d) Managing the solution once deployed.

Our service is designed to be of use when a standard COTS product is not suitable for your needs. We have no interest in persuading you to take a more expensive bespoke solution when a lower cost product quality option is available as you will be disappointed if you discover such a solution in the future and compare the relative costs.

Our expertise is based on the following principles of solution design and development:

- a) It is based on the selection of enterprise strength COTS technology to:
  - i) Keep costs down.

- ii) Uses generic industry standard platforms available from multiple vendors.
- iii) Ensure that the selected devices have the necessary interfaces to support equipment management and health monitoring.
- b) Standards Based
  - i) It is component based around industry standards allowing progressive evolution of components on an item-by-item basis over time without having to tear down and replace the whole system.
  - ii) Spare equipment can be pre-configured, so that replacement of failed or failing equipment is simple.
  - iii) When an item is replaced, the replacement can join the network sufficiently configured to be accessible, then accessed to be brought up into full configuration, where appropriate by recovering from a backup of the removed device.
- c) Ease of use:
  - i) By exploiting standard hardware and industry standard software we ensure that in the event you wish to terminate the service it should be possible to find trained staff who can take over from us.
  - ii) We pre-configure equipment and provide excellent operational procedures so that most of the level 1 support can be carried out by non-specialists or even untrained staff.
  - iii) In the case of a video monitoring system, it was essential that the solution included the capacity to store large volumes of data for an extended period to meet legal obligations as well as the ability to search the video store by meta data to recover and view data at a required level of quality.
  - iv) It was also necessary to include archive and purge functions so that data was no longer required to be held could be identified and deleted and the action recorded for audit purposes.
- d) Security And Availability
  - i) There is no single point of failure
  - ii) Interfaces permit early identification of potential failure and proactive preventative maintenance to replace that component before it actually fails
  - iii) In the event of the failure of a particular component, there is always a backup that can take over or continue.
  - iv) All devices can operate in a secure fashion with data encrypted at rest and in flight.
  - v) Included in our designs is a Business Continuity / Disaster Recovery plan to facilitate recovery from a wide range of scenarios.
  - vi) Similarly included is a capacity planning option so that we can predict the change in load on a component and hence when its resources may become consumed, so that we can replace it in a coming maintenance window before any failure occurs with a device of greater capacity.
  - vii) Supported by a secure network partitioned into security domains using appropriate network hardware devices and configuration patterns.
- e) Existing Infrastructure:

- i) The design will determine whether the solution can operate over the existing infrastructure or requires an additional dedicated platform, for example an additional Wi-Fi infrastructure.
- ii) We may also make recommendations for additional infrastructure components such as alternative or additional WAN/Broadband network providers where a solution spans multiple sites.
- iii) It is likely that we would recommend installation or upgrade of UPS systems and possibly standby generators to protect the business from loss of external power.
- f) We also have expertise in unstructured non-text data analytics such as:
  - Monitor the movement of people through an area of surveillance handing off between cameras through triangulation techniques as a person or other object such as a car moves through an area of interlocking cameras. Examples might include:
    - Looking for patterns of behavior such as loitering which may be a precursor to a crime.
    - Identifying people who may be at risk and taking management action to protect them.
    - Identifying cars parked illegally or who have broken down in a dangerous situation so that an appropriate agency can be alerted to take action.
  - ii) Applying ANPR technology to video.
  - iii) Applying face recognition technology to stored or real time video to identify persons of interest and take management action.
  - iv) Where video includes voice:
    - Carrying out voice to text and then text mining to analyses conversations.
    - Applying voice identity techniques to voice recordings to identify individuals.
  - v) Linking to other data sources to develop a profile of objects of interest.
  - vi) Monitoring people entering a premises to determine whether they are good customers or people who have been excluded from a premise previously and need to be apprehended and removed.
  - vii) In the above cases we provide third party technology, integrate it and generate the required analytics outputs which we then categorize and pass by workflow to the person that needs to take action.

#### 1.3 COTS services

Most solutions will require you to take a range of our COTS services such as our remote monitoring, Vulnerability scanning, BCDR, security policy and hardware management services. If so, these may be provided as defined services deployed across your business or limited in use to management of the components of this solution.

A good example of a solution design that we have delivered is a camera monitoring system. This was a specialist system for an organization that required particular activities in the business to be monitored by camera for the organization to be able to conduct its business. A system failure of more than 2 hours would require the business to cease trading until the fault could be rectified.

### 2 Commercial Terms

We will develop with you a design supported by assumptions, a risk assessment and a support model on which the design is based, which you will review, your agreement not to be unreasonably withheld.

You pay for the costs of underlying equipment and services required for the design, including but not limited to:

- a) Hardware
- b) Software
- c) Additional infrastructure required by the design.
- d) Third party implementation services of for example additional network or power cabling.
- e) Our charges for our services to implement the design.
- f) Once the system is commissioned and accepted:
- g) You pay a single monthly subscription charge for each device you plan to have on the network.
- h) Generally, there will be a first-year uplift charge to reflect a higher level of support required by you while you are getting used to the system.
- i) We review this charge on the anniversary of the service starting based on the level of support you have required from us using a model defined in the design.
- j) Typically, the uplift would be removed if the level of support required to be provided by us during the year has been within the limits we agree with you.
- k) We manage all of the underlying technology and you do not have access to the administrator passwords so that we can be assured of the underling configuration of all components on the system.

When you take our service there is an initial 1-year commitment. You can terminate use of the service completely giving 30 days' notice on completion of the initial period.

If you terminate the service then we stop managing the solution and have no further responsibilities to you. The equipment is yours and remains in place and we will provide you the appropriate details for you to manage it yourself.

Your charge is monthly in advance for payment within 15 days. We can take check or credit card but request you set up regular ACH payments to minimize administration and costs for both parties.

A small discount is available for increased long-term commitment or annual payments in advance provided payments are via ACH.

#### 3 Service benefits

Where an organization needs a simple solution, we can advise on the purchase of COTS products that are of sufficient quality for the important requirements, classified by MUST, SHOULD and COULD, and where the cost of support can be constrained, and ideally where the management of the solution can be integrated into our existing services provision.

We can advise on the relative costs of a complete COTS solution with either no or a low upfront cost and a high overall support charge by comparison with a bespoke solution with a higher upfront design cost but lower future support charges. We can

advise if there is a risk that a COTS solution will become obsolete and go out of support requiring complete replacement with the associated disruption and cost that is entailed. We can compare a COTS approach with a software solution using underlying COTS hardware, where the software is under support and maintenance and the hardware can be upgraded piecemeal at a much lower replacement cost.

The benefits of taking this service are maximized for an organization that needs a sophisticated bespoke system that it wants to operate itself or have it operated by a sub-contractor and have the flexibility to integrate it with other components over time, yet does not want the support costs to escalate out of control.

As we provide a number of our underlying services you will have all the benefits of those, and we particularly not the benefits of our hardware management service which will allow you clear identification of future costs of COTS hardware that needs to be replaced over time, so that effective planning, an understanding of total cost of ownership and the ability to compare the costs of our service with the costs of any alternative fully COTS offerings as they develop over time, so you can always demonstrate the business case for continuing to take the service.

## 4 Deploying and Operating the Service

The following steps are required to develop and deploy this service:

- a) Treat this procurement as a project an ensure that both the customer and us appoint a project manager responsible for day-to-day delivery and an executive with authority to commit their organization.
- b) Develop a design and establish a whole of life expected cost model including support.
- c) Ensure that there are clear terms of reference agreed for all roles during the lifetime of the system.
- d) Run a proof of concept (POC) in the lab to ensure that the functionality is understood and signed off before any material costs are incurred and retain this POC for future testing prior to upgrading the production system.
- e) Implement any upgrades to infrastructure that are essential before any deployment can take place.
- f) Deploy a MVP installation if practical to prove the solution in operation.
- g) Progressively expand, extend and harden the solution to production quality.
- Progressively upgrade the operational procedures to simplify the operation of the solution, ensure any sharing of responsibilities is clear and reduce the cost of maintaining the system.

Typically, we then operate this for you, limiting administrative access to only our staff to ensure that if an issue arises we know that our staff are responsible for the issue and for fixing it.

### 5 Supporting Documentation

As we are operating this service, there is no requirement for extensive documentation on the service itself to be provided to you, but we will maintain appropriate documentation and show you that it exists. We provide you a short operations manual describing:

- a) Our understanding of your environment on which the solution is dependent, particularly where we are not in full control of that environment.
- b) Your responsibilities to inform us in good time of any changes that might impact our management of the solution.
- c) How you should carry out any support responsibilities that you have. For example, we might under agreement delegate level 1 support functions to you that can only be carried out on-site allowing us to work remotely and hence constrain costs.
- d) The operation of our support system, how you can track any issue that has arisen and the SLAs and KPIs by which you can measure our performance.

#### 6 How Support Works

The following is a brief description of our support mechanism. This is explained fully in our support manual:

- When an issue occurs on the solution that is automatically reported to us then we document then triage that problem.
- A new issue is then raised in our service desk environment, on behalf of the nominated user associated with the item of equipment concerned.
- We may merge incidents reported for many devices if they are fundamentally the same problem, and particularly if you take another of our services that would report problems with the network.
- You may raise a support issue directly for any item of equipment we are managing by using the Company's icon on your machine. As soon as this appears on our service desk environment, you can then add further comments or information related to the problem.
- All information related to the issue should be entered via service desk but we will accept calls to escalate urgent/serious issues by email or phone.
- Once an issue is raised, you can then track the issue through to resolution.

Support is provided during the working day between 0800 and 1800. Optionally you can purchase extended support for out of hours or 24 x 7.

At the end of each month, you are provided with a report describing our performance against agreed KPIs.

Our service desk is available at the following URL

https://cysure.atlassian.net/servicedesk/customer/portal/2

### 7 What is not included

Generally onsite support is not included as part of this service: we work with your onsite representative. However, we are able to provide onsite support as part of our Equipment Managed service offering.

However, as this is primarily a bespoke service, we can address that at the design phase.

## 8 How we may change the service from time to time

Technology vendors come and go and better product alternatives may arise from time to time.

Our service is based on purchasing software licenses and subscriptions which we then use to deliver the service. From time to time the technology vendors of these products increase their prices and we need to similarly increase our prices.

We will publish any revised prices on our website and will notify you of any price rises giving you 3 months' notice of such price rises. By taking this service you agree to accept any such price rises. You may terminate the service if you wish.

We may change the product we use to provide this service at any time. It is then our responsibility to ensure that the change of product has no impact for you. Note:

- a) the most likely reason for a change would be that an alternative product either provides significantly more functionality at a comparable price or is more cost effective for the capability delivered.
- b) As we would bear to cost of any transition, this is not something we would do lightly!

#### 9 Terminating our service

If you decide to terminate our service, then for this service you must provide us 30 days' notice of termination.

If you terminate this service there is a small termination charge calculated based on the outstanding period of the underlying annual router license which will continue to run on your router until the completion of the license term. We will calculate this and invoice you once you give notice.

On termination we will no longer monitor your router or any aspect of your networks. We will also disconnect your WIFI extenders from our management hub. Until you configure them using an alternative support facility you will no longer be able to issue GUEST WIFI tickets.

On termination and provided we have received payment in full on all outstanding invoices, we will provide to you details of all passwords and other confidential information related to your network hardware so that you can continue to manage the network yourself.

After one month or sooner if you request, we will remove details of the devices from our management platform and then remove all details of your organization from the platform.

It is your responsibility to archive any reports important to you before you terminate as once we remove your organization from the platform all historic data is deleted.

If you require any assistance from us when terminating, for example to transfer to an in-house solution or to an alternative vendor, then as a responsible supplier we will assist you in this process if requested and charge you at our standard professional services rates on a time and materials basis.

If you request to purchase our network training package, we can deliver this training and show you how to manage your network. We encourage you during this period to prove that you have full access based on the passwords or other details we have provided.