



SAPPHIRE

**Sapphire Services: Compliance with the
GSI Codes of Connection for GCSX and
GSX**

Introduction

This document has been designed to highlight the solutions in Sapphire's portfolio that can be implemented to assist your organisation in successfully completing the GCSX or GSX Code of Connections to the GSi.

Sapphire provides a comprehensive array of information assurance services to its clients. All of Sapphire's employees are cleared in accordance with the Baseline Personnel Security Standard (BPSS). In addition to this, a third of our consultancy team have higher security clearances allowing us flexibility to deliver to the most rigorous customer requirements.

Sapphire is financially stable and in a recent publication by Dun and Bradstreet Inc. Sapphire is highlighted as being in the top 3.5% of IT companies in the UK that are financially strong – a huge achievement in today's economic climate.

In addition to the products and solutions detailed in this document. Sapphire has developed a methodology which is designed to assist an organisation achieve compliance with any code of connection.

This involves examining how your organisation measures up to the various controls within the relevant code of connection and then producing a Risk Treatment Plan that outlines exactly the work that is required to comply fully. Sapphire's consultants will assist in completing the code of connection and can advise on the requirements for a formal risk assessment and accreditation.

If you require further information, please contact us on **0845 58 27001** or visit **www.sapphire.net**.

“Obtaining authorisation to the GSx was an essential element of English Partnerships transition to the new Homes and Communities Agency. Initial research identified a number of consultants with GSi experience, but Sapphire was the only organisation I could find who had previous experience with GSx.

Our CLAS consultant, took us painlessly through the process, prepared our RMADS, and readily provided practical support as we worked through the gaps in required controls. With Sapphire's help, we achieved our authorisation ahead of our target date.”

Pat Watson, Information Security Officer, Homes and Communities Agency

1. Physical Security

Organisations are required to ensure that all equipment is located in secure accommodation in line with best practice.

As part of Sapphire's CLAS Consultancy Service, Physical Security Assessment Visits can be performed as required by the Security Policy Framework Mandatory Requirement 51.

Relevant Services: *CLAS Consultancy*

2. User Education

Sapphire's consultancy team are well respected as experts in designing a range of tailored awareness and training exercises, user publications and tailor made workshops (including forensic training / internal audit) to achieve the required information security culture. These training sessions are often presented as part of a larger consultancy project.

Relevant Services: *ISO27001 Consultancy*

Relevant Products: *MetaCompliance,
Symantec Control Compliance Suite*

3. Incident Response

There are specific obligations placed on organisations connecting to the GSI which may not be captured in normal incident management processes. These include the ultimate reporting of incidents to GovCERT UK as well as compliance with GPG18 – Forensic Readiness.

Sapphire has designed a range of methodologies to capture the increasing range of security incidents and breaches. This area is crucial for management reporting.

Relevant Services: *CLAS Consultancy
Forensic Response, Symantec Security Information Manager*

Case Studies

Devon County Council
NHS Fife

4. Configuration

The various codes of connection for the GSi (and associated links) are very prescriptive as to how networked devices should be configured. Not only is this relevant for servers, but all clients too.

Sapphire can ensure that all servers are hardened appropriately as part of its IT Health Check scheme. To ensure that networks remain resilient to attack, Sapphire can also advise on patching schemes, configuration checking and other forms of vulnerability scanning.

Relevant Services: **CLAS Consultancy**
 CHECK Consultancy

Relevant Products: **Lumension Sanctuary Device Control**
 Safend Data ProtectionSuite.
 Symantec Control Compliance Suite

5. Compliance Checking

An IT Health Check must be performed annually by a CHECK or CREST registered provider. The objective is actually to determine what threat an organisation poses to the GSi rather than the threat to the organisation from the internet. It must be appreciated that this does limit the usefulness of the report. With care, the scope can be defined so as to still meet the requirements of the code of connection without being exceptionally onerous on the organisation.

Relevant Services: **CLAS Consultancy**
 CHECK Consultancy

Case Studies

Derbyshire County Council
Deutsche Postbank AB
Sunderland City Council

“Overall, we are delighted with the service received from Sapphire. We have a dedicated account manager which makes communicating with the various departments within Sapphire painless.”

Phillip Humphries, Infrastructure and Operations Manager at Christian Aid

6. Access Control

Sapphire can assist in advising on background checks in accordance with the Baseline Personnel Security Standard as well as ensuring that authentication mechanisms meet the requirements of the GSi community. Typically, these prohibit the use of generic accounts as well as insisting on the minimum complexity for passwords.

Relevant Services: *CLAS Consultancy*

Relevant Products: *Evidian Enterprise Single Sign On*

7. IP Addressing

The requirements of these controls are quite straight forward, however it is often misunderstood. Care must be taken to ensure that the IP range used internally is not registered to a third party and must be RFC1918 compliant. Renumbering is very often a complex issue and Sapphire's Technical Consultants can assist with the considerations around this.

Relevant Services: *Technical Consultancy*

Relevant Products: *Symantec Control Compliance Suite*

8. Firewalls

Sapphire has worked with all major vendors since it's inception and can provide guidance on how to select and configure a firewall. Further, Sapphire's CLAS Consultants are able to design networks compliant with GPG8 – Protecting External Connections to the Internet.

Relevant Services: *CLAS Consultancy*

Relevant Products: *Stonesoft StoneGate*

“Sapphire were an immense aid in the getting the system working to our requirements in a very tight timescale.”

Tim Simpson, IT Support Manager, Dundee City Council

9. Intrusion Detection

Sapphire has worked with all the major IDS / IPS vendors; however Sapphire's experience becomes invaluable when developing a suitable, scalable protective monitoring policy in accordance with GPG13 – Protective Monitoring.

Relevant Services: *CLAS Consultancy
Technical Consultancy*

Relevant Products: *Stonesoft IPS, Symantec Enterprise Protection/Critical System Protection*

10. Mobile / Home Working

Sapphire can assist in developing a remote working solution that meets the criteria of any GSI Code of Connection.

Sapphire's experience shows a number of areas that, historically, are missed by vendors in this area and therefore, compliance to GPG10 - Remote Working is paramount.

Relevant Services: *CLAS Consultancy
Technical Consultancy*

Relevant Products: *BeCrypt Trusted Client
BeCrypt DiskProtect
Microsoft Forefront Unified Access Gateway
PGP Encryption Platform
Swivel PINsafe
Symantec Enterprise Protection*

Case Studies

Fareham College
Warwickshire County Council

“Throughout every stage of this process we have been able to go to Sapphire and ask them for their expert advice.”

Stuart Chapman, Director of Facilities and IT at NatCen

11. Wireless Networks

Sapphire can assist in ensuring that any proposed wireless network meets the requirements of Manual Y as stipulated by this control.

Further, where wireless networking is available within a connecting organisation, it must be included within the scope of an IT Health Check.

Our wireless IT Health Checks will check for common configuration errors that could allow an attacker to compromise the network. The testers will attempt to crack wireless encryption keys and gain access to the network.

Relevant Services: **CLAS Consultancy**
 CHECK Consultancy

12. Network Obfuscation

Sapphire can assist by examining typical data leakage areas including portscans of external hosts, e-mail and DNS records to determine what information is available to a potential attacker about your network.

Relevant Services: **CHECK Consultancy**
Relevant Products: **Symantec Data Loss Protection/PGP**

13. Protective Monitoring

With the introduction of GPG13 – Protective Monitoring, the requirements of this control have become significantly more complex. Depending on the type of GSi connection implemented, there are even different requirements within GPG13 that must be adhered to.

Sapphire has developed and analysed protective monitoring policies for complex, multi-domain systems.

Relevant Services: **CLAS Consultancy**

Relevant Products: **LogRhythm**
 Symantec Information Manager
 Symantec Data Loss Prevention

14. Patch Management

It is no longer sufficient to just patch Microsoft products and consideration must be given to patching all software including Linux servers, Oracle applications, web applications, bespoke applications and especially Adobe Reader. The requirements of this control usually also mean that for the first time, organisations have to consider implementing a patching policy for firmware.

Sapphire can advise on the suitability of any patching scheme and if necessary make recommendations as to how it can be improved.

Relevant Services:	CLAS Consultancy CHECK Consultancy
Relevant Products:	Symantec Endpoint Management (Alteris)

15. Removable Media

Sapphire can assist in the selection of appropriate tools to administer and appropriately control the risks posed by removable media. This can include ensuring that devices are encrypted, disabling third party devices, restricting the use of such devices, secure destruction and other treatments.

Relevant Services:	CLAS Consultancy
Relevant Products:	BeCrypt DiskProtect PGP Endpoint Device Control Safend Data Protection Suite Symantec Endpoint Protection (device control)

16. Multi Domains

A number of “odd” controls in older version of the GSi Code of Connection were replaced by this one. There are a number of requirements which are often overlooked or can lead to confusion. Sapphire’s CLAS Consultancy are able to succinctly determine whether any portion of this control is relevant to a connecting organisation.

Relevant Services:	CLAS Consultancy CHECK Consultancy
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17. Proxies

The use of proxy servers is a key line of defence in keeping an organisation's internal network safe from viruses, malware and other inappropriate software. Sapphire is able to advise on the configuration and implementation of various network proxies.

Relevant Services: *CLAS Consultancy*
Technical Consultancy

Relevant Products: *M86 Security MailMarshal*
M86 Security WebMarshal

18. Web Enabled Applications

In Sapphire's experience, these controls are very often misunderstood and it's CLAS Consultancy team are well aware of the typical failings. Further, very often by meeting the requirements of these controls, much productivity software will be prevented from working. Sapphire has experience of writing a business case to support the various control elements.

Relevant Services: *CLAS Consultancy*
CHECK Consultancy

Relevant Products: *Symantec Endpoint Protection*
Symantec Critical System Protection

19. Content Analysis

Sapphire has vast experience of many different software products that can scan for any IP traffic. Following a consultation Sapphire will recommend tools for protecting the gateway and defending against malicious code.

Relevant Services: *CLAS Consultancy*
Technical Consultancy

Relevant Products: *M86 Security MailMarshal*
M86 Security WebMarshal
Symantec Endpoint Protection
Symantec Critical System Protection
Symantec Web Gateway
Symantec Mail Security (Brightmail)

20. Macros

Similar to 18 above, the use of macros in productivity suites is very widespread.

Sapphire's CLAS Consultants are able to determine a suitable solution based upon the requirements of the organisation that will meet the standard for the relevant code of connection.

Relevant Services:	CLAS Consultancy Technical Consultancy
Relevant Products:	Symantec Critical System Protection

"I have worked with Sapphire for the last 4 years and have always found them to be extremely professional and knowledgeable. The main difference between Sapphire and the other companies that I have worked with in the past is their honesty and integrity.

I feel that in the last four years, I have developed a high level of trust with them and a good working relationship. I have no hesitation in approaching them first when I require external guidance or advice."

Ian Merritt, IT Security Officer, NHS Borders

21. Email

Historically, the use of HTML e-mail was frowned upon and in certain circles such as HMG, it has to be used with care. Similarly, vulnerabilities in mail clients was a key vector for compromising hosts. Sapphire's CLAS Consultants can explain the threats and risks and explain suitable countermeasures to ensure that the connecting organisation meets the requirements of the relevant code of connection.

Relevant Services:	CLAS Consultancy Technical Consultancy
Relevant Products:	M86 Security MailMarshal M86 Security WebMarshal

22. Mail Servers

Similar to 21, however this has a number of technical controls that are frequently misunderstood why they are being asked within a code of connection.

Relevant Services: *CLAS Consultancy*

Relevant Products: *M86 Security MailMarshal*
M86 Security WebMarshal
Symantec Mail Security (Brightmail)

22. Mail Labelling

Sapphire's CLAS Consultants are experienced in developing mail classification and handling policies that will meet the requirements of this control. There are various options that need to be carefully considered prior to deploying a product or deciding on an operational process.

Relevant Services: *CLAS Consultancy*

Relevant Products: *Titus Labs*
Symantec Data Loss Prevention
Symantec Mail Security (Brightmail)

Relevant Sapphire Services

CLAS Consultancy

CESG is a division within GCHQ, often referred to as the “third intelligence service”. CESG is the National Technical Authority for Information Assurance within Government.

Recognising that there was an increasing demand for authoritative information assurance advice for Government departments and agencies the CESG Listed Advisor Scheme (CLAS) was created by approving a pool of high quality consultants.

All CLAS Consultants hold a formal HMG Security Clearance (a minimum of SC) and are authorised to provide information assurance advice on systems processing information up to and including UK SECRET.

The delivery of CLAS consultancy is specifically tailored to the UK Government departments, executive agencies, related contractors and the wider public sector such as:-

- Central and devolved Government.
- Local authorities.
- Organisations forming part of the Critical National Infrastructure.
- Non-Government organisations.
- GSI and CJX connected organisations.
- Those handling Government Protectively Marked assets such as Police and Health services and some private sector organisations.

Case Study

Sunderland City Council

“Finding a partner that we could work with and share a mutually beneficial relationship was important to us. Sapphire’s consultants went the extra mile to understand our business. They worked with us, rather than for us and offered advice and guidance throughout the process.”

Tony Smith, IS Security Coordinator, Northumbrian Water

CHECK Consultancy

The IT Health Check Service, or CHECK, was developed by CESG to enhance the availability and quality of the IT health check services that are provided to government in line with HMG policy.

Sapphire is a member of the CESG CHECK scheme and has maintained the 'Green Light' status since 2004.

Clients engaging with companies certified to 'Green Light' status are assured that they have selected a provider with a highly qualified, appropriately experienced team who will provide the very best quality service.

Sapphire is measured against the high standards set by CESG. Therefore, HMG and CNI customers can be assured that they will receive a high quality service if the work is carried out under the Terms and Conditions of CHECK. CHECK can incorporate external, internal, web application and wireless testing.

Case Studies

Derbyshire County Council
Deutsche Postbank
Northumbrian Water

“Throughout the project, Sapphire’s consultants were on hand to offer independent advice and provide support. Having worked with Sapphire since 2001, it did not surprise me that the level of service we received was of such a high standard”

Sonya Buczyn, IT Advisor, East Lothian Council

#becrypt

BOOLE™
s e r v e r

celestix

LogRhythm®
COMPLY. SECURE. OPTIMIZE.

 MetaCompliance®
Developed by Baronscourt™

Microsoft®

M86™
SECURITY

PGP®

 PORTSYS
UK

STONESOFT


SWIVEL®
Authentication Solutions

 TITUS