THREE RIVERS & WATFORD SHARED SERVICES JOINT COMMITTEE

Date of meeting: 28/06/10

PART A   AGENDA ITEM

7

Title: *ICT THIRD PARTY SUPPORT*

Report of: Avni Patel - Head of ICT

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1.   **SUMMARY**

1.1   This report outlines the proposal for 3rd party support for the Finance and Revenues & Benefits systems in order to alleviate the risk of either key system being unavailable during core hours.

2.   **RECOMMENDATIONS**

2.1   That the Joint Committee agrees to the growth in the Revenues & Benefits and Finance budgets for these systems to be supported sufficiently as below:

- Revenues and Benefits – Option 2 for 40 vouchers
- Finance – Option 1 for a 3 year ongoing commitment

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Report approved by:
Tricia Taylor – Executive Director Resources – Watford Borough Council
David Gardner – Director of Corporate Resources & Governance – Three Rivers D.C.

3.	**DETAILED PROPOSAL**

3.1	The Revenues and Benefits system (Academy) and the Finance System (COA) are both now live with WBC and both councils respectively. The implementation of the TRDC Academy system onto the shared Microsoft based server has been delayed.

Revenues and Benefits Support (R&B)
The previous R&B system at WBC (Civica) was a Unidata database held on a Microsoft server which was fully supported by the 3rd party supplier as part of our support contract with them. Any upgrades to the live system were planned and conducted by the department system administrator out of hours or resulted in downtime during core hours.

The current R&B system at TRDC (Academy) is an Ingres database held on a UNIX server which was supported by Steria in conjunction with the 3rd party supplier. Upgrades to the live system are currently performed out of hours to minimise impact on service delivery. In the last financial year and years previous to this, any cost associated with out of hours upgrades (Steria overtime backed up by Capita consultancy if required) was met by under spends in either the ICT or the R&B budgets. This is now supported by the ICT Shared Service in conjunction with Capita support but there is currently no UNIX support as this was provided by a specialist team within Steria who were not within the scope for TUPE transfer.

The new R&B system that has been implemented for WBC and will soon be used by TRDC is an Ingres database held on a Microsoft server which is supported by the ICT Shared Service in conjunction with Capita support (only available from 9am to 5 pm, Monday to Friday). There is currently no budget provision for support from Capita for changes to the live system out of hours. This means that if ICT Shared Service perform weekend or evening upgrades and there are problems that require Capita input, they would only be available to assist from 9.00 am on the next working day. Due to the nature of the R&B there are usually multiple updates required within any given year which increases the risk to both councils.

Finance Support

The previous Finance system at WBC (Aptos) was based on an Oracle database which was supported fully by the supplier. An option to purchase the database support from the supplier was taken up by the council as this is a specialist ICT area and not many other council systems were based on Oracle. Traditionally the cost of training to become an Oracle developer is high and would require a considerable amount of investment to ensure that the skill was developed and maintained in-house.

The previous Finance system at TRDC (Powersolve) was based on Ingres and supported by Steria in conjunction with the software supplier. Oracle support was not required and therefore it is not a skill that was brought to the ICT Shared Service by staff that TUPE'd in form Steria.

The new Finance system for both councils (COA) is based on Oracle and was not purchased with database support from the supplier. This poses a risk to the council in that there is currently no budget provision or in-house skill to maintain the database or indeed troubleshoot any problems that may arise.

4 IMPLICATIONS

The main objective of both systems is to be highly available especially during core hours to enable effective and efficient service delivery.

Revenues & Benefits
The R&B system is critical due to it's role in providing a service to the residents and businesses of Watford and Three Rivers. It is heavily used by staff during core hours and will be also used more my customers directly with the implementation of the self service module.

In the short term, the lack of in-house UNIX support is a big risk to TRDC and the R&B Shared Service.
The lack of support form Capita for out of hours work is a longer term risk to both councils and will need to be addressed as a long term solution.

There are two options to overcome this risk:
1. Subscribe to the remote support contract offered by the supplier, this would cover above and beyond what we require and would mean that we would be paying for the supplier to carry out tasks that can be performed by in-house staff e.g. Ingres Support. This option still leaves us with a lack of support for UNIX related work (see appendix 1).
2. Purchase a set number of vouchers for consultancy or technical time from the supplier. This could include upgrade support, UNIX support as well as other technical expertise (see appendix 2).

It is the opinion of the Head of ICT that the most cost efficient way of covering both these areas is with the purchase of 40 call off vouchers that will each provide 2 hours worth of consultancy from Capita. This can be used out of hours (at double time) to provide any service we require. Once the TRDC system has been migrated to the new servers, UNIX support will no longer be required and we can reduce the call off vouchers in the next financial year. This could be further reduced if the number of upgrades that were released by the supplier were to reduce.

This would allow more flexibility and cost effectiveness rather than subscribing to a remote support contract with the supplier at a high cost.

Finance
The Finance system is key to the day to day management and running of both councils. It's users are mainly internal council staff but it interfaces with many other systems such as online payments and the R&B system.

It does not carry the same risk as R&B in terms of out of hours upgrades due to the frequency of upgrades only being annual or even less. These upgrades could be planned during core hours or alternatively be resourced with savings within either the Finance or ICT budgets.

The major risk to the Finance system is the lack of in-house expertise both within ICT and Finance of maintenance of the Oracle database that is integral to the system. The following options are available to minimise this risk:

1. Purchase the database configuration service annually as part of the support directly from COA (appendix 3).
2. Train ICT staff in Oracle development and build the skill in-house; extra support would be needed for a period of time until all Applications Staff are trained and au fait with the system in order to maintain resilience (appendix 4).

It is the recommendation of the Head of ICT that the database configuration service be purchased direct from the supplier so that expertise in this area it at hand when needed. This also reduces the ongoing training cost to the council that would arise from new versions of the database software being released and also training that may be required if staff turnover increased.

4.1 Policy

4.1.1 The recommendations in this report are within the policies of the Joint Committee, Three Rivers District Council and Watford Borough Council.

4.2 Financial

4.2.1 There will be growth to the budget already agreed by the Joint Committee, Three Rivers District Council and Watford Borough Council.

Costing is summarised below and detail can be found in the appendices.

Revenues and Benefits support

Option 1:

Remote Support Options	1 year	3 years	5 years
Full support not including Out of Hours	£50,787	£47,965	£44,144
Full support including Out of Hours	£60,944	£57,558	£54,173

Option 2:

Pre-Paid Vouchers	
30 vouchers (total of 60 support hours)	£9,000
40 vouchers (total of 80 support hours)	£11,200

Finance support

Option 1:

Database administration service	Annual charge
1 year contract (non renewable)	£10,500
3 year commitment	£10,000

Option 2:

Training options for Oracle skills were investigated as the COA product requires Oracle DBA skillsets. The training to bring an applications analyst within ICT to DBA level would be as follows. In addition to this, a 1 year contract for the database administration is recommended whilst training is undertaken by ICT staff.

Oracle Overview - 1 day -	£400
Enterprise Manager for Oracle - 2 days (Use of front end using a GUI interface)	£800
Oracle DBA 11g Part 1 - 5 days (Overview of the main elements involved in DBA role)	£1,600
Oracle DBA 11g Part 2 - 5 days (Part 1 in more detail)	£1,600
Oracle DB performance management - 4 days (Fine tuning of the database)	£1,400
Training Total (per person)	£5,800
Training total for 8 Applications Analysts	£46,400
1 year database administration service	£10,500
Total	£56,900

4.3 **Legal Issues** (Monitoring Officer)

4.3.1 None specific

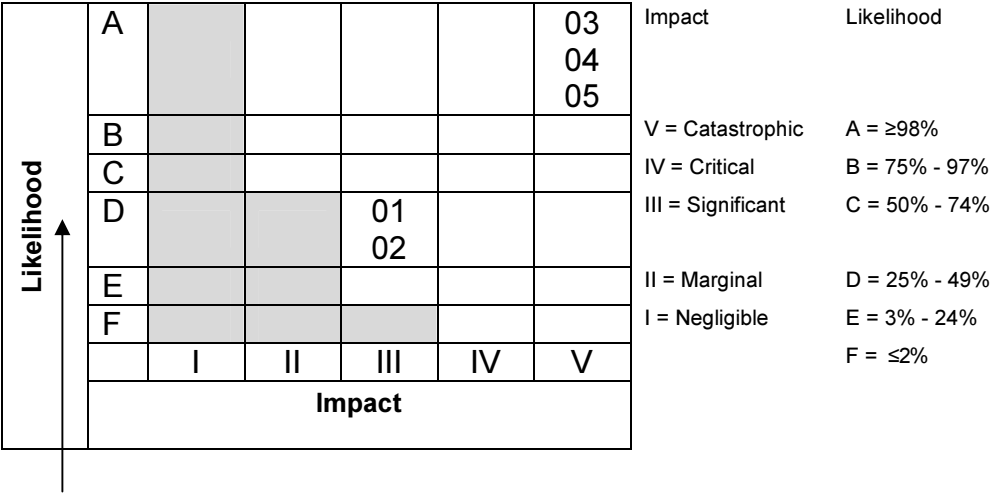4.4 **Risk Management and Health & Safety**

4.4.1 The following table gives the risks if the recommendation is agreed, together with a scored assessment of their impact and likelihood.

	Description of Risk	Impact	Likelihood
01	The growth results in an increase in budget	III	D
02	The capita vouchers are not sufficient to cover the support required over the year.	III	D

4.4.2 The following table gives the risk that would exist if the recommendation is rejected, together with a scored assessment of its impact and likelihood:

	Description of Risk	Impact	Likelihood
03	No change is made and downtime has to be planned for upgrades during core hours.	V	A
04	Increased complaints into the council due to system being unavailable to process claims for Benefits customers	V	A
05	Finance database problems cannot be fixed and are done on a best endeavours basis with COA.	V	A

4.4.4 The above risks are plotted on the matrix below depending on the scored assessments of impact and likelihood. Risks are tolerated where the combination of impact and likelihood are plotted in the shaded area of the matrix. The remaining risks require either monitoring or managing, in which case a treatment plan is prepared.

Likelihood		I	II	III	IV	V		Impact	Likelihood
	A					03 04 05			
	B							V = Catastrophic	A = ≥98%
	C							IV = Critical	B = 75% - 97%
	D			01 02				III = Significant	C = 50% - 74%
	E							II = Marginal	D = 25% - 49%
	F							I = Negligible	E = 3% - 24%
		I	II	III	IV	V			F = ≤2%

Impact

Appendices

Appendix 1 – Capita Remote Support proposal
Appendix 2 – Capita Pre-Paid Support Vouchers quote
Appendix 3 – COA Technical Service Proposal
Appendix 4 – Oracle DBA course costs

CAPITA
SOFTWARE SERVICES

Remote Support Services

Written By: Kevin Pattenden
Date: April 2009

UNIX

Operating System Installation and Support.

Patch installation
> (Where essential for Ingres or Academy products).
> Installation of correction patches to the Unix Operating System

Operating System Upgrades
> (When certified as required by Capita for use with the Academy products).
> Installation of software upgrades to the Unix Operating System

Hardware Upgrades
> (If purchased by the Customer and are designated by the supplier as Customer installable).

System Administration

User administration
> Example: creating new operating system user names.

Printer administration
> Defining new printers to Unix, amending printer definitions, helping to resolve printing problems.

System back-ups
> Set up the Unix script to perform system back-ups to tape;
> Set up a cronjob to run the backup script daily;
> Periodically (at least weekly) check that the back-ups are successful.

> NOTE: It is the Customer's responsibility to change the tapes each day.

Kernel and System tuning
> Periodically (at least quarterly) check to ensure the Unix system is set up for maximum performance.

Capacity Management and reporting.
> Periodically (at least monthly) check disk and processor usage and agree actions with the Customer, where necessary.

Network administration
> Configure network settings on the Unix server.

Creation of bespoke UNIX shell scripts (not interfaces)

> Capita may require a script to be written and run to ensure the continued satisfactory operation of the Academy application software.

Ingres

Ingres installation and support

Patch installation (Where essential for Academy products)
> From time to time CA Ingres issue correction patches to their products which require installation on the Unix server.

Ingres upgrades (When certified as required by Capita for use with Academy products).
> CA Ingres issue new versions of their products from time to time which require installation on the Unix server.

Ingres Administration

User Administration
> Addition and deletion of user names as required

System parameter tuning
> Monitoring and amendment of Ingres parameters for optimum performance.

Ingres database checkpoints and housekeeping
> The Academy products supply a means of checkpointing and housekeeping the databases using the scheduler. The Customer must ensure these jobs are included in their daily/weekly schedules as appropriate. Capita will supply advice and guidance as to when and how these tasks should be included in the Customer schedules.

> Capita will periodically review the number of checkpoints available and keep to an agreed number of checkpoints to ensure disk space is always available.

Academy Applications Support

PRODUCTS:
(Select as appropriate)

> Academy Housing Benefits
> Academy Council Tax
> Academy Overpayments
> Academy Payments
> Academy NNDR

Product upgrades and enhancements
> Academy product release installation – up to five days notice is required.
> Test systems will be installed during normal office hours.
> Live systems will be installed at times agreed with the Customer.
> Each new release must be installed into a test service before the live installation.

Product Administration
> Assist with the resolution of Application related problems when reported by the Customer.

Printer administration

    Includes new printer definitions, printer formatting (landscape, portrait, etc.).
    Excludes document templating and reformatting.

Database Checkpoints and Housekeeping

    It is the responsibility of the Customer to ensure these jobs are included in their daily/ weekly schedules as appropriate. Capita will provide advice and guidance as required. The Customer should report any failure of these jobs to the Capita Remote Support Team as soon as possible.

Copy live data to test

    Most Customers require their live data to be copied to their test services from time to time. Capita will perform this copy in the way most appropriate to the Customer's requirements.

    Up to five days notice may be required to perform this task. (This element is limited to 12 database refreshes per year.)

Other Actions

    From time to time it may be appropriate for Capita to perform other services on behalf of the Customer.

    If these actions would incur an additional charge, then the Customer will be informed prior to the work being carried out.

General Support

Monthly Client Reports

Provide a report on the current Customer situation. This report will include:

- current software releases;
- disk space usage;
- number of jobs held in the application;
- number of documents held in the application;
- any recommendations that are appropriate;
    - major problems that occurred during the reporting period;e.g. system backup failures, priority 1 calls;
- other information that the Customer may reasonably request.

Call Log Reports

Calls logged onto the Remote Support Help desks can be viewed via the Capita Software Services website. The website will allow some reporting of calls placed, closed etc.

Quarterly Review Meetings

A member of the Remote Support Team will visit the Customer site to review the level of service being supplied and discuss any points relevant to the service.

We suggest quarterly is an appropriate frequency for these meetings but this can be varied by mutual agreement.

Schedule 1 – Help Desk Response and Escalation Procedures

Remote Support Help Desk

The Remote Support Service will operate within the normal working hours of the Capita Help Desk, unless specifically stated in this document or in a separate agreement.

All calls logged will be given a priority based on the severity of the problem as agreed between the Customer and the Consultant involved.

As an example:-

      - priority 1 will mean system down or unusable;
      - priority 2 for other problems;
      - priority 3 for something foreseeable and can be planned.

The standard working hours are as follows:

      8:00 am – 6:00 pm: (Monday to Friday) excluding English bank and public holidays.

The following Service Charter will apply to all calls placed with the Capita Remote Support Help Desk:

Call Priority	Severity	Impact	Target Response Time	Target Resolution Time
1	Business critical issue	Impact is dependent on number of users affected – preventing progress with running the business.	1 hour	4 hours
2	Business process impact	A problem in a key process or function, not preventing progress but causing business problems if not resolved within target period or period as agreed by both parties.	4 hours	5 days
3	Minor impact or request for change	A minor problem either cosmetic or otherwise, not preventing the operation of the system.	2 days	10 days

In the event of a priority 1 call, if a diagnosis cannot be made within one working day and it is appropriate, a Consultant will attend site the following working day, and remain on site until a plan has been agreed.

Escalation Procedure

Escalation procedures are as follows:

If the call is not being resolved within the timescales agreed at the time the problem was logged, the call should be escalated to the Remote Support Manager.

Should a satisfactory reply not be received within 48 hours the call should be escalated to the Technical Services Director.

Site	Watford	Three Rivers	Combined	Combined 3 Year Contract	Combined 5 Year Contract
3 Months Ingres Only *	£4,725	£4,725	£8,505		
3 months Apps Only *	£7,245	£7,245	£13,041		
3 Months OS only *	£3,038	£3,038	£5,468		
6 Months Ingres Only *	£7,290	£7,290	£13,122		
6 Months Apps Only *	£11,610	£11,610	£20,898		
6 Months OS only *	£4,050	£4,050	£7,290		
12 Months Ingres Only *	£10,395	£10,395	£18,711		
12 Months Apps Only *	£18,315	£18,315	£32,967		
12 Months OS only *	£5,940	£5,940	£10,692		
* Excludes Out of Hours, (OOH). Can be included at an extra 20%					
Totals					
Full Support Not Inc OOH	**£28,215**	**£28,215**	**£50,787**	**£47,965**	**£45,144**
Full Support Inc OOH	**£34,065**	**£34,065**	**£60,944**	**£57,558**	**£54,173**

CAPITA

QUOTATION

CUSTOMER NAME AND ADDRESS		
Watford Borough Council Town Hall Watford London WD1 3EX		

DATE OF ISSUE	12/05/2010
QUOTATION NO.	RENX LS/132

DESCRIPTION OF ITEM	Charge	Services
Pre-Paid Support Vouchers x 30	£9,000	£0
Pre-Paid Support Vouchers x 40	£11,200	£0
Out of Hours	£12,000	£0
Total Cost (Excl. VAT)	**£32,200**	**£0**

Please see page two for a detailed description of all items listed

OTHER INFORMATION
Please detail the quotation number on your purchase order

QUOTATION STATEMENT

This quotation is presented on behalf of Capita Business Services Limited whose registered office is at 61-71 Victoria Street, London, SW1H 0XA ("Capita"). Unless expressly stated this quotation is valid for a period of 30 days from the date of issue and supersedes all prior quotations and associated documents relative hereto. This quotation does not constitute or create a binding contract between Capita and the Customer and does not bind Capita to supply the listed items. This quotation contains information, which is considered confidential or commercially sensitive to Capita and its suppliers and should not be disclosed to third parties without the written permission of Capita Directors and disclosure to the customers staff should be on a 'need to know' basis. Any purchase order placed, based on this quotation will subject to the Terms & Conditions of trading of Capita Business Services. Cancellation Policy: for cancellations received less than five full working days prior to the agreed commencement of service, the full charge will be applied.   E&OE

SIGNED ON BEHALF OF CAPITA		SIGNED ON BEHALF OF CAPITA	
SIGNATURE		SIGNATURE	
NAME	Lee Summers	NAME	Jon Peart
POSITION	Account Manager	POSITION	Technical Business Manager
DATE	12/05/2010	DATE	12/05/2010

Purchase orders must include the above quotation number and can be:
  Emailed to your account manager
  Faxed marked for the attention of Cheryl Summer-Starr to: 08701631869
  Posted to: Cheryl Summer-Starr, Capita Software Services, Manvers House, Manvers Street, Trowbridge, BA14 8YX

Watford Borough Council and Three Rivers District Council Technical Services Proposal

Version 1.0

Prepared by:
Hilary Parfit
COA Support Management

Dated:
7th May 2010

Document Number:
070510hp/01

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Document Change History

Version	Date	Author	Reason for Change
1.0	7th May 2010	Hilary Parfit	No previous document.
1.1	10th May 2010	Hilary Parfit	Adjusted to offer an initial 1 year only monthly RDBA service

Reviewers

Name	Company & Role
Jonathan Willatt	Project Manager
Caroline Casey	COA eFinancials Services & Support Director

Contents

Confidentiality

This proposal does not constitute a formal offer for the provision of services, it is provided as an initial discussion document. COA Solutions would be pleased to present and discuss this proposal with Watford Borough Council and Three Rivers District Council in order to provide further clarifications as necessary and to tailor the service specifically Watford Borough Council and Three Rivers District Council requirements.

The material contained in this proposal represents proprietary, confidential information pertaining to COA Solutions Ltd products and methods. By accepting this proposal, Watford Borough Council and Three Rivers District Council hereby agrees that the information in this proposal shall not be disclosed outside of Watford Borough Council and Three Rivers District Council and shall not be duplicated, used, or disclosed for any purpose other than to evaluate this proposal. If, however, a contract is awarded to COA Solutions Ltd for this proposal as a result of, or in conjunction with, the submission of this information, Watford Borough Council and Three Rivers District Council will have the right to duplicate, use or disclose the material contained herein to the extent provided for in the resulting contract.

Executive Summary

COA Solutions is pleased to submit this proposal to Watford Borough Council and Three Rivers District Council for remote Technical Services.   Watford Borough Council and Three Rivers District Council are an existing eFinancials customer.

COA Technical Services have been operational for over 10 years, and many of the original customers of this service are still customers today. This proposal will now proceed to describe COA Solutions Technical Services as requested by Watford Borough Council and Three Rivers District Council.

COA Technical Services

At COA we have a reputation for success in delivering high quality business solutions to our clients on time and within budget. Our technical consultants have many years experience of delivering high quality business solutions in partnership with our clients.

Partnership with our clients is inherent to COA and embedded in our company culture. Our approach is based upon the accumulation of knowledge and best practice gained from delivering best value, socially inclusive solutions to many UK clients. COA has a wealth of knowledge and experience from Technical service delivery to share.

Costs Summary

Description	Price Per Annum £
Quarterly Database Health Check	6,600
Monthly Database Administration Service	10,000
Configuration Management Service	5,500

Inclusions and Assumptions

- All prices quoted here will be annually increased in line with CEL index.
- Proposal is based on a 3 year commitment.
    - An initial 1 year contract for the monthly database administration service is also offered to Watford and Three Rivers Councils at £10,500.00.
- Expenses as incurred will be charged for all on-site visits.
- For remote services the client will provide a facility for to have remote access to the required servers. There will be no additional cost for COA Solutions. Access will be via modem and/or VPN.
- The client will undertake to change daily backup tapes, labelling, recording and storing appropriately.
- Additional work can be completed on a time and materials basis.
- Hours of service are 9am to 5.30pm Monday to Friday excluding English Public and Bank holidays.
- Pricing is based on LIVE, TEST and TRAIN environments for the use of Watford Borough Council and Three Rivers District Council.
- Standard code
- Prices based on support of the following applications:
    - Business objects
    - eFinancials
    - eProcurement
    - ISS
    - CP
    - Paperclip
    - Web COA
    - eAnalyser
- Prices exclude VAT and are subject to standard terms and conditions.

- Proposal is valid for 60 days

Remote Database Administration

Remote Database Administration Service

Our service is designed to fulfill the role of an in-house database administrator (DBA) relieving customers from the task of recruiting specialist database skills. In addition to a high level of database administration skills, our service offers considerable years experience in Oracle coupled with COA Solutions applications, and thus a comparable service can't be easily sourced externally to COA.

Using COA Solution's remote DBA service offers customers a breadth of skills and guaranteed DBA resource that can only be available when working with a team.   Our DBA team holds Oracle Certified Professional (OCP) accreditation.
COA Solution's Remote DBA Approach
We aim to deliver zero unscheduled down time by addressing problems before they arise. We proactively measure and monitor the database on a monthly basis to detect any impending problems.

Our monitoring includes the following:

- Database alert logs and trace files
- Review of database storage
- Schema object alerts
- Database Audit alerts
- Database resource utilization
- Database performance statistics

A more detailed list of tasks is contained in appendix A.

Benefits of COA Solution's remote database administration services
Maximizes system availability
Maximizes system performance
Full audit of backup and restore process
Access to technical database expertise

A typical task list is included in appendix A. The tasks will vary slightly depending on the version of Oracle the customer has installed.

Typically the service will be initiated by an on-site visit, and thereafter the customer can request a bi-annual on site visit. The visit is included in the service price, however, expenses are chargeable at the customer's agreed rate with COA Solutions.

Remote Quarterly Database Health Checks

Quarterly Database Health Check

This service comprises 4 database health checks and summary reports per year. The content of the Database Health Check and report will be as per the monthly service described above. This offers sufficient cover for smaller sites, and can be used as additional support where the customer is building in-house Oracle skills and requires some added security.

Any remedial work identified as necessary during the health check will be carried out as part of this service, with the exception of any large pieces of work which would exceed the 1.5 day allowance per quarter.   This service is limited to 6 days (1.5 per quarter) scheduled effort per annum.

Please note this is not a comparable service to our Database Administration Service. This service is a Database Health Check service only. Any additional work between the scheduled Health Checks, or requests for extra database work, for example refreshing the TEST database with LIVE data, will attract an additional charge. Additional work will be charged at our standard daily rate.

The Task list in appendix 1 highlights in blue items excluded from this service.

COA Configuration Management

COA Configuration Management Service

Our configuration management service is responsible for the controlled installation of fixes, patches, and updates to COA applications. Using a COA Solutions resource to do this minimizes the risk of delays and disruption that can arise from unsuccessful installations.

The service is initiated with a remote audit of your COA Solutions applications comprising:

Take a "base line" of test and live system (list all program version numbers)
Document differences between test and live systems
Record build differences to the standard COA Solutions build
Establish configuration management records
Explain the configuration management process

Thereafter the configuration management process will be delivered remotely as detailed below.

On receipt of the patch, fix, build or update the customer will email dba.support@coasolutions.com and request that the update be applied to the COA application. COA and the customer will agree a mutually convenient time to proceed.

All updates will firstly be applied to the test environment for the customer's staff to carry out their own acceptance testing in addition to the testing already undertaken by COA's Quality Assurance (QA) department. On completion of successful testing, the customer will authorise COA to promote the update to the live (production) and train environments.

A more detailed list of tasks is contained in appendix B

4   General Terms and Conditions

Access

It is assumed that full and timely access will be provided to Watford Borough Council and Three Rivers District Council's facilities, systems and information as required by Remote Technical Service consultants.

Education

Watford Borough Council and Three Rivers District Council's staff is assumed to have in depth knowledge of Watford Borough Council and Three Rivers District Council's business processes.

Working Hours

Working hours of COA Technical Service's team are between 9am and 5.30pm excluding weekends and English Bank Holidays. Overtime working will not be carried out unless mutually approved. Agreed working at weekends or English Bank Holidays will attract a premium day rate.

Office Space and Equipment

Watford Borough Council and Three Rivers District Council will endeavour to provide the COA Consultants with the following:

- An area suitable for work when on-site, including a desk, access to the eFinancials system and printing facilities.
- Access to a meeting room for project meetings or workshops when required with white board and/or flipchart.

Appendix A - Monthly Database Administration Service

MONTHLY DBA SERVICE TASKS	COA	Client	Comments	Example for Clarification
Database Administration				
Access to DBA resource any time during COA standard office hours	√			Requests for work can be submitted to a DBA between 9am and 5.30pm each working day, excluding English Bank and Public holidays. The request will be responded to in accordance with the urgency of the request.
Perform Initial Database Health Check and Summarise findings	√			Initial on site database health check and familiarisation with client's staff and site operations.
Monitor Table growth	√			If tables grow beyond the size specified to increase the space available to the table to ensure processing can continue. For example; max extents error
Monitor Index growth	√			If indexes grow beyond the size specified to increase the space available to the index to ensure processing can continue. For example: max extents error or poor performance.
Monitor Datafile free space	√			Data files must have enough available space to accommodate new data. For example: Failure to insert a record, For example a new invoice.
Monitor Rollback Segments	√			If there are not enough rollback segments or these are not sized correctly this can at worst halt the system, therefore would need to regularly check their performance and that they are correctly sized.
Monitor Table space Fragmentation	√			Without correction to a fragmented table space, a large enough portion of free space may not be available to the database; although the sum of free space shows sufficient space exists. Good housekeeping would regularly reduce fragmentation thus making best use of available disk space.
Monitor Redo Log usage	√			Redo logs must be sized correctly, incorrect sizing can result in poor system performance. This is often seen as poor application response times.
Determine Table Placement	√			For systems where disks are not RAID 0+1, but are configured as individual disks may need to spread the most popular tables/table spaces across available disks so as to avoid hot spots.
Check Database Log and trace files	√			Some errors that do not appear to the Client are reported in the Oracle error logs and trace files; these must be checked regularly to identify problems early.
Complete Database Administration Log file	√			Record changes and activities in Dial In report.
Create & Modify Table indexes as deemed necessary	√			COA DBA will tune the sizes to meet each the Client's processing requirements.
Resize Table spaces	√			As above
Resize/rebuild Tables	√			For example: COA DBA may rebuild a table that has reached several hundred extents and could be degrading system performance in a certain area of functionality.
Resize/rebuild Indexes	√			For example: COA DBA may rebuild an index where the leaf level has reached an unacceptable level and could be affecting performance.
Monitor Database Performance Ratios	√			COA DBA will sample performance statistics from the Oracle statistical tables; these provide an overview of system performance since the last database restart. These will be monitored regularly.
Tune database	√			When performance ratios fall below acceptable values,

MONTHLY DBA SERVICE TASKS	COA	Client	Comments	Example for Clarification
parameters in line with statistics collected				COA DBA will investigate and take corrective actions as appropriate to improve the system performance ratios.
Configure Oracle Auditing in Line with client site requirements	√			Where auditors require auditing of specific Oracle events, configure Oracle auditing accordingly.
Retrieve Oracle Auditing data as requested by client	√			Retrieve Oracle audit information as requested. Simple report format.
Update Test Service with Live Data	√			Copy the live data into the test database at users request.
Enable Oracle Archived Redo Logs	√			COA will always seek to switch on Archived redo logs where possible as this can aid system recovery in the event of a system failure. This requires a suitable disk and the agreement of the Client to jointly manage the process (see backup notes later).
Automate clear down of Archive Logs	√	√		For example, on Unix platforms it is common practise to script the deletion of archived redo logs that have been successfully backed up to tape. The Client's system administrator would prepare and execute this script as per COA's recommendation.
Run Oracle Traces as part of troubleshooting	√			If COA (or other vendor) requests an Oracle Trace, COA DBA can carry out this task at client's request.
Assist application vendors (eg) with database enquiries	√			As above
Manage User and system passwords	√	√		COA DBA can make amendment to system accounts and passwords on written request from the client.
Creation and maintenance of SQL queries.	√		Tasks requiring effort exceeding 3 hours may be chargeable.	COA DBA will construct simple SQL queries/reports on request from the Client. It is at 's discretion whether this will incur an extra charge. The decision will be based on expected effort to complete. Those exceeding 3 hours may attract and extra charge.

Oracle Patches

Decision to apply Oracle patch	√			Oracle patches may be required to correct bugs in the oracle RDBMS or the FORMS. COA DBA will identify when Oracle patches are required.
Authorisation to apply Oracle patch		√		The client must authorise in writing if application of an Oracle patch is required.
Apply Oracle RDBMS/Forms Patches	√			COA DBA will apply the patch at a mutually convenient time to the test system; the Client will be responsible for testing the system and agreeing that the Oracle patch be promoted to the live (production) system/s.

Server Backups

Advise and Assist with back-up procedures specific to Oracle Databases	√			Server backups are the responsibility of the client's system administrator. COA DBA will assist the client in achieving a consistent backup of the Oracle database by advising the Oracle procedures to be incorporated in backup script. For example: COA DBA will advise the client to shutdown the database before running a file system (data) backup. The client is expected to be able to execute a restore from a file system (data) backup. COA DBA would perform any necessary restore from Oracle export/RMAN etc.
Define and document backup procedure		√	Will assist in identifying backup solutions to meet business requirements.	The client shall ensure all data and operating system files are backed up to tape on a regular basis. The regularity of the backups will be dictated by the business requirements. For example, where the business can suffer no more than ½ day lost data - might in this scenario recommend the solution of online backups of the database be performed at lunch time each day and a cold backup (database closed) of the database be taken each evening.
Monitor successful backup		√		The client will check that backups work. For example, check block count, list contents of tape.
Manage backup records		√		The Client will record the success/failure of backups in a

MONTHLY DBA SERVICE TASKS	COA	Client	Comments	Example for Clarification
				log file. COA may periodically require confirmation of successful backup from the client. For example, prior to an Oracle upgrade.
Manage backup media rotation		√		The Client will decide how long to and where to retain backup tapes. For example, normal practice might be to retain daily incremental backups for 1 month and weekly full system backups for 12 months. Thus daily tapes cannot be rewritten to for 31 days. COA DBA may request access to such backups if system recovery is necessary.
Configure advanced backup/failover Oracle Technologies.				At the time of writing this includes RMAN, Standby databases and data guard. RAC is excluded. Please check with us for any other solution not listed here.
Remote Access				
Configuration of Remote Access for Server		√		Client will configure a method of access for to enable to dial in. eg: install and configure PC Anywhere on Servers
Define Access Requirement	√			COA DBA can advise the particular areas of the system that they will need access to. For example; d:\oracle
Document connection Process	√			COA DBA will document the connection process for team use.
Ensure availability of remote connection		√		The client must ensure COA can dial in as necessary.
Test Remote connection	√			COA DBA will test the remote connection once available and confirm it is suitable.
Permit and Restrict Remote access as applicable		√		The client reserves the right to restrict access as they see fit. However, should be made aware of the process in advance and the client shall acknowledge that restricted access may effect 's ability to provide the Remote DBA Service.
Users and Passwords				
Create Operating system user accounts		√		Operating system administration is the responsibility of the on-site (or 3rd party), not COA.
Create Oracle user accounts		√		The client or COA can create oracle accounts in the database.
Request password changes		√		As above
Operating System				
Configure Operating system to accommodate Application	√	√	COA may recommend modifications to OS configuration	The Client or COA can carry out any specific requirements of the operating system for use by Oracle.
Monitor Disk Space		√		The Client will ensure adequate disk space is available to the users, COA's database etc.
Apply Operating System patches		√		The Client will apply operating system (OS) patches as necessary; however, prior to installation the Client must confirm with COA that the OS patch is compatible with Oracle version.
Make recommendations for improved configuration				COA may suggest improved configurations where they feel the current configuration is negatively impacting the system. For example, COA may request additional disk be installed or may request an operating system patch be installed.
Maintain systems log of changes made		√		The Client should hold complete configuration control and change management records. COA may need access to these records.
Create Operating System Accounts		√		The Client's system administrator will create and maintain any operating system user accounts.
Install Server Printers		√	Client to provide driver software For printers.	
Install client printers		√		Printers attached to user PCs will be installed and supported by the Client.
Troubleshoot Server		√		As above

MONTHLY DBA SERVICE TASKS	COA	Client	Comments	Example for Clarification
Printers				
Run diagnostics		√		As above
Check Error logs		√		Error logs not associated with Oracle are the Client's responsibility. These should be checked prior to calling COA in the event of problems. For example, system down
General Housekeeping – clear down reports > x weeks old, deleting mail (UNIX only)		√		The Client is responsible for operating system housekeeping. For example, deleting old files that are no longer required, for checking operating system error logs daily etc
Clear down event logs (NT only)		√		The Client should clear down the NT event log; otherwise this can consume all available disk space which will in turn stop the system.
Disk Management		√		The Client (or 3rd party) is responsible for the health of the disks installed in the Servers. For example, the Client's own site staff should investigate a disk light flashing orange as this may be reporting disk corruption.
Manage System Backups		√	Client will maintain tapes	
Performance Monitoring and tuning		√		The performance tuning of the operating system is the Client's responsibility. For example, adding additional swap space when more memory is installed.
Financials / Efinancials Specific Tasks				
Define Server printers to Application	√	√	Financials v8.x	
Create application user accounts in security editor		√		
Assistance in troubleshooting Link and Load problems	√	√		Link and Load functionality uses Oracle; therefore, in the event of Oracle errors COA would assist in the troubleshooting this process.
Installation of Application Patches		√	This can be purchased separately from COA Solutions	Please ask about COA's Configuration Management Service if this task is unable to be resourced by internal staff.

Quotes below obtained from http://www.paritytraining.com

Oracle 10g/11g Courses

Course Title	Code	Duration	See Key For Details	Course Price	
Oracle 10g Application Server	O10GAS	5 days		£1,695	Book
Oracle Database 10g DBA using Enterprise Manager	O10GDBA	2 days		£725	Book
Oracle Database10g DBA Backup & Recovery with RMAN	O10GDBABR	3 days		£995	Book
Oracle Database 10g DBA - Part II	O10GDBAII	5 days		£1,595	Book
Oracle Database 10g DBA - Part 1	O10GDBAI	5 days		£1,595	Book
Oracle Database 10g DBA Performance & Tuning	O10GDBAPT	4 days		£1,395	Book
Oracle Database 10g Data Guard	O10GDG	3 days		£995	Book
Oracle Database 10g Managing Oracle on Linux for DBAs	O10GMOL	2 days		£725	Book
Oracle 10g RAC Configuration & Administration	O10GRAC	5 days		£1,995	Book
Oracle 10g SQL Performance Tuning	O10GSPT	2 days		£725	Call Us
Oracle Database 11g for Experienced 10g Database Administrators	O11G10	5 days		£1,795	Book
Oracle Discoverer for Administration	ODM	3 days		£995	Book
Oracle 10g Discoverer Plus For End Users	ODPE-STA	2 days		£695	Book
Oracle 10g Discoverer Plus For End Users	ODPE-STA	2 days		£695	Book
Solaris 10 for Experienced Solaris System Administrators	SFT	2 days		£795	Book

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