



APSE
Housing, construction and
building maintenance
advisory group

Manchester - Tuesday 10<sup>th</sup> January 2012 Llandrindod Wells - Thursday 12<sup>th</sup> January 2012





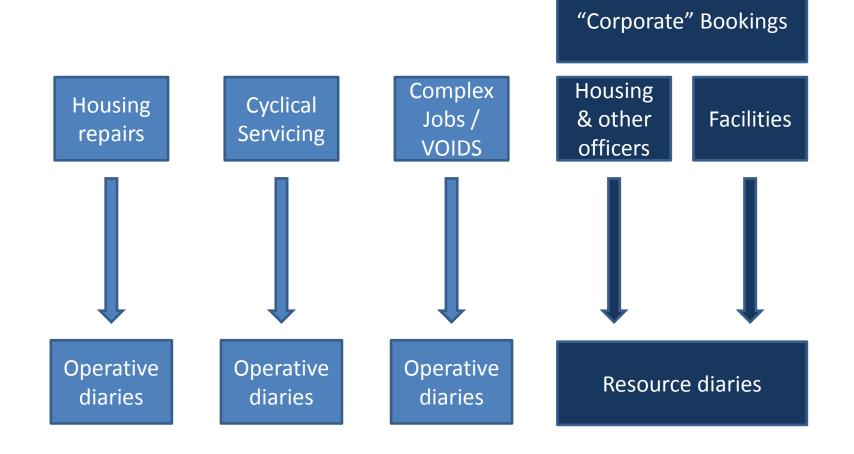
#### Introductions

• William Corn - Xmbrace





#### **OPTI-TIME** scope









## The repairs balance



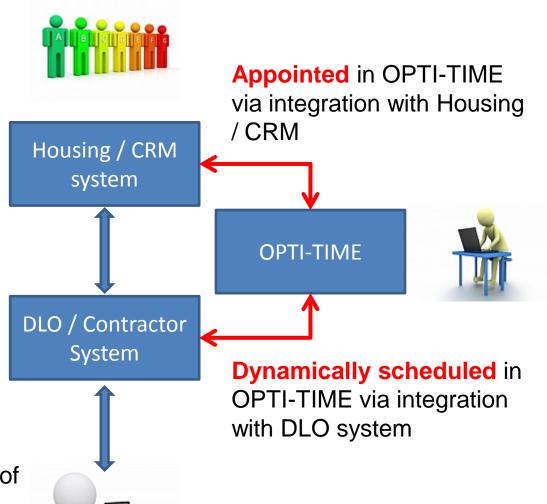
Finding the right balance with OPTI-TIME





#### Business process – 2 elements of OPTI-TIME

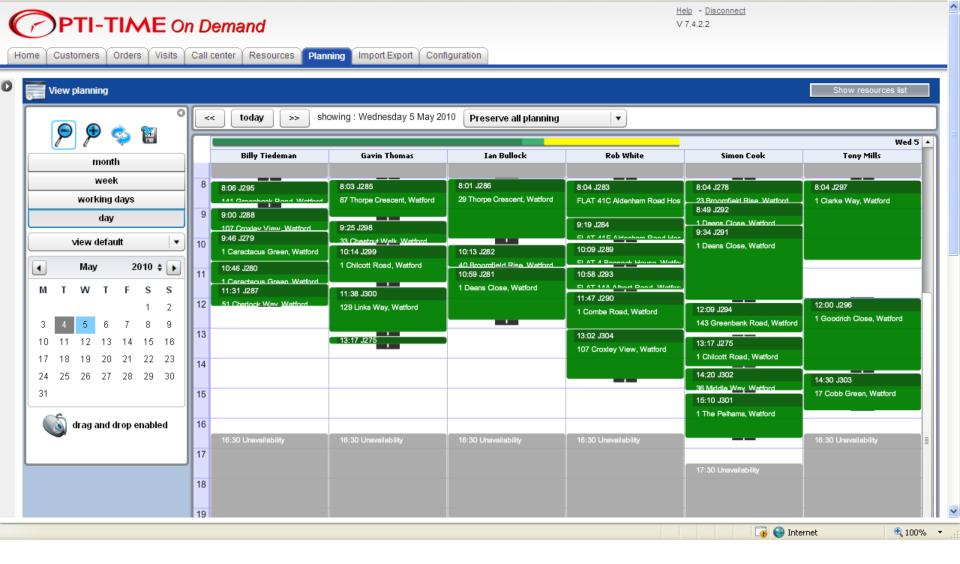
Tenant repair requests raised in CRM / Housing



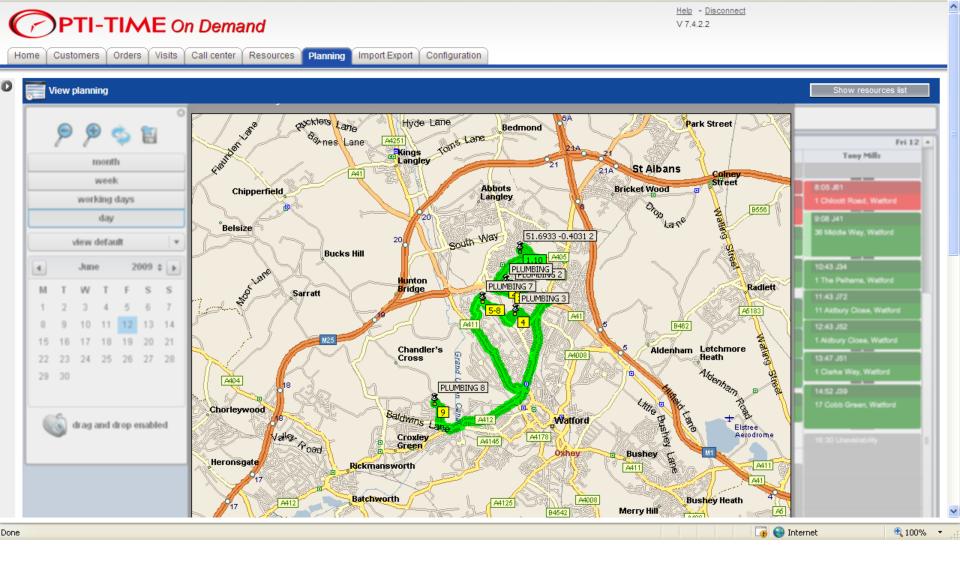
DLO system dispatch/receipt of job details to/from operative's mobile







OPTI-TIME is an intelligent resource scheduling system – this means it holds live diaries for all operatives and it understands your rules about which operatives to use for which work



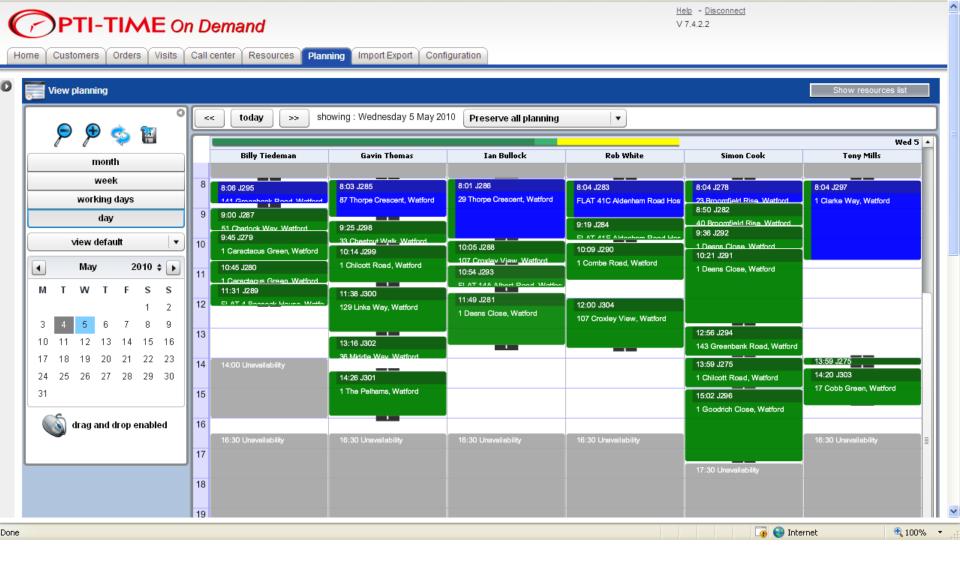
All work is route planned to try and minimise the global travelling time within your workforce. 1 & 10 are start & end points, 2-9 are job sequence.





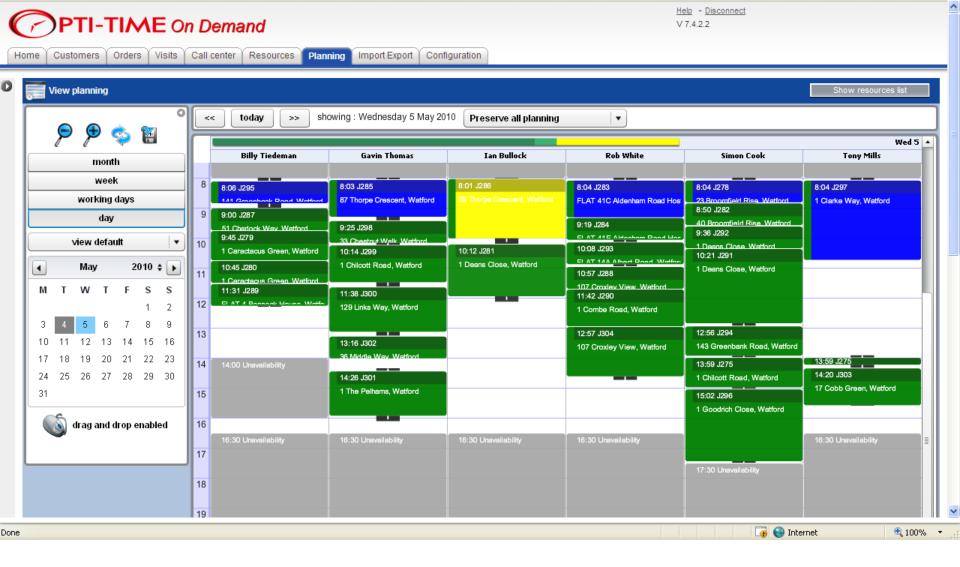
Appointments: The above screen is based on real availability, location and usage rules of your operatives, the colours and stars show when a suitable operative is nearby so that excessive travel can be avoided at point of appointment. The customer is then sent a text message confirming the appointment





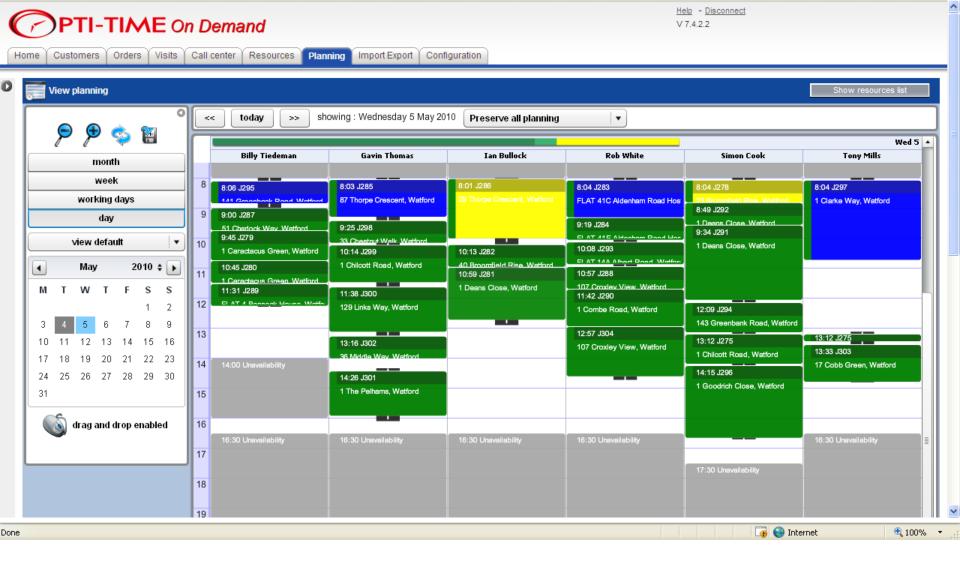
At the start of the day, the first job for each operative is automatically despatched to their handheld devices (PDA), the diary shows the status in real-time





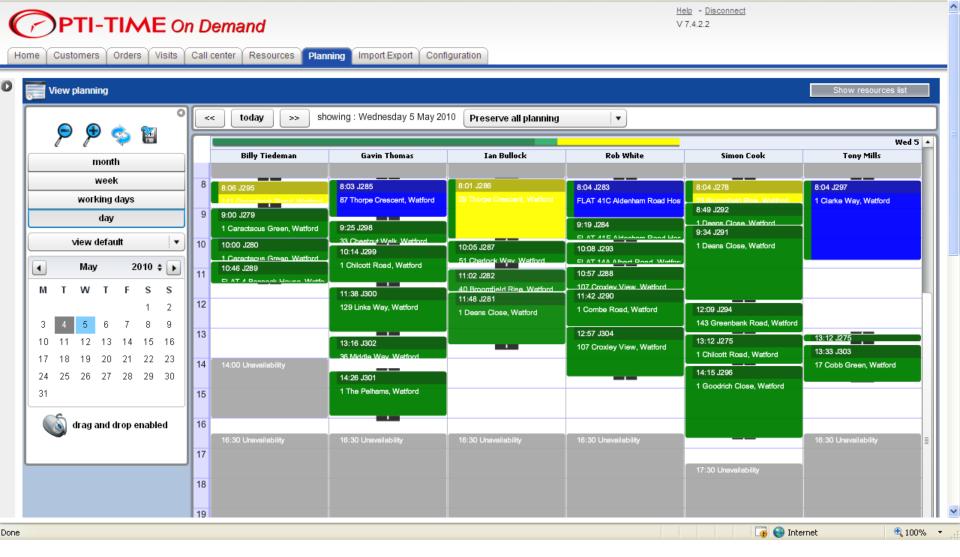
As operatives log on and receive their jobs, the diary view updates so you know exactly what is happening





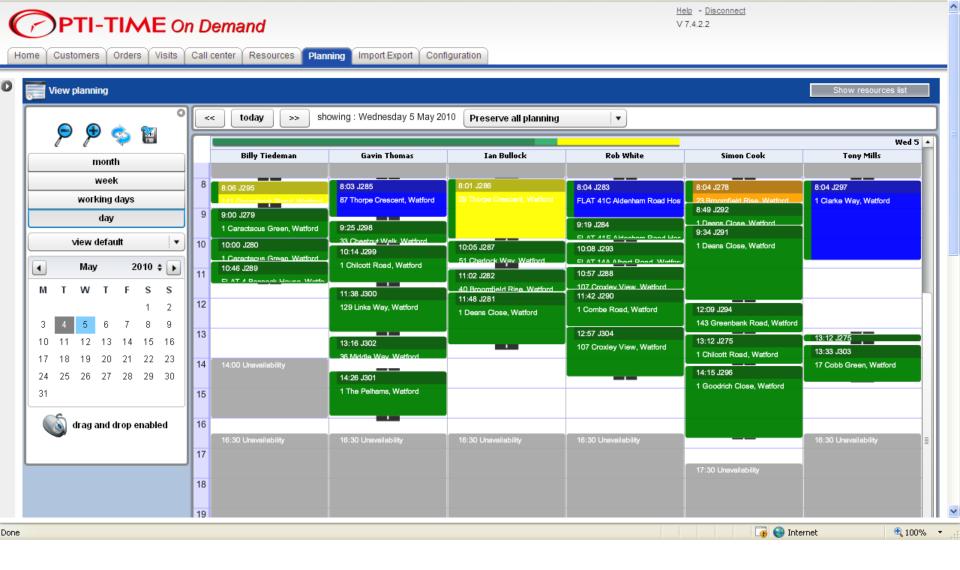
This then repeats as second operative logs on





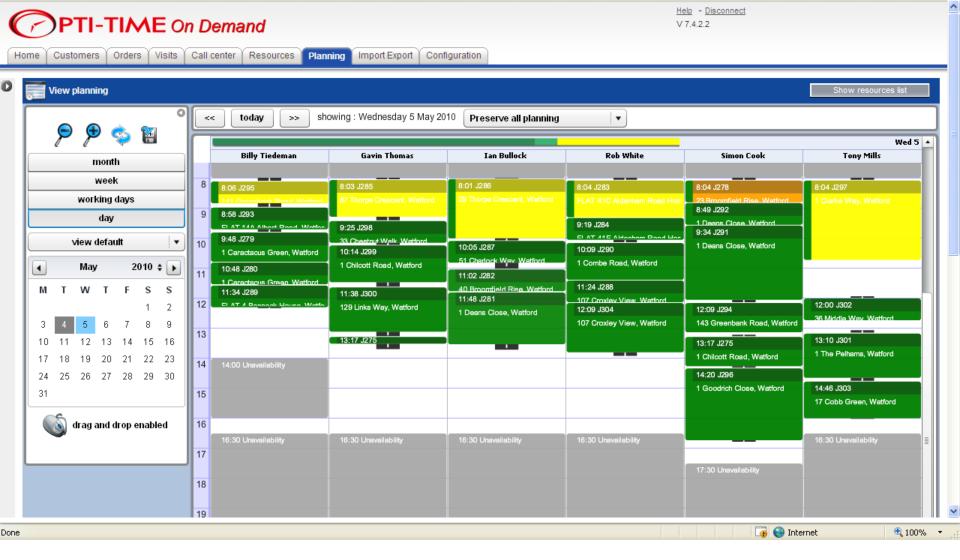
Third operative logs on





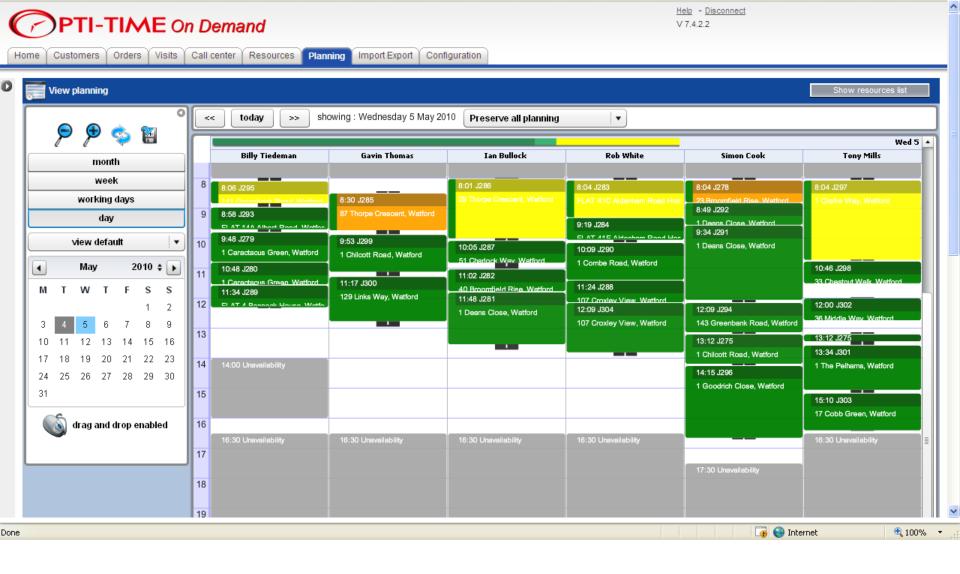
The job that has turned orange above indicates that the operative is on-site and has started work



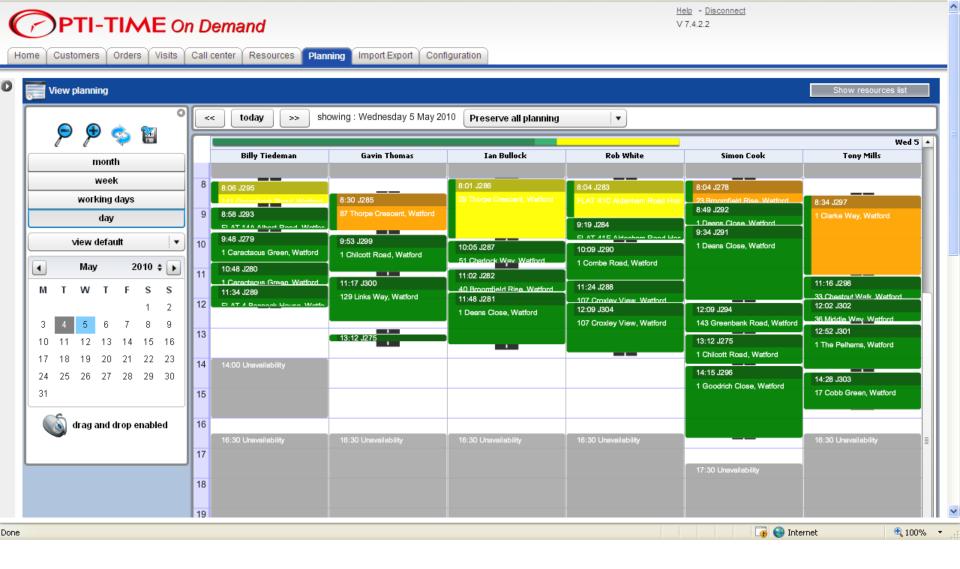


All operatives have accepted their first jobs



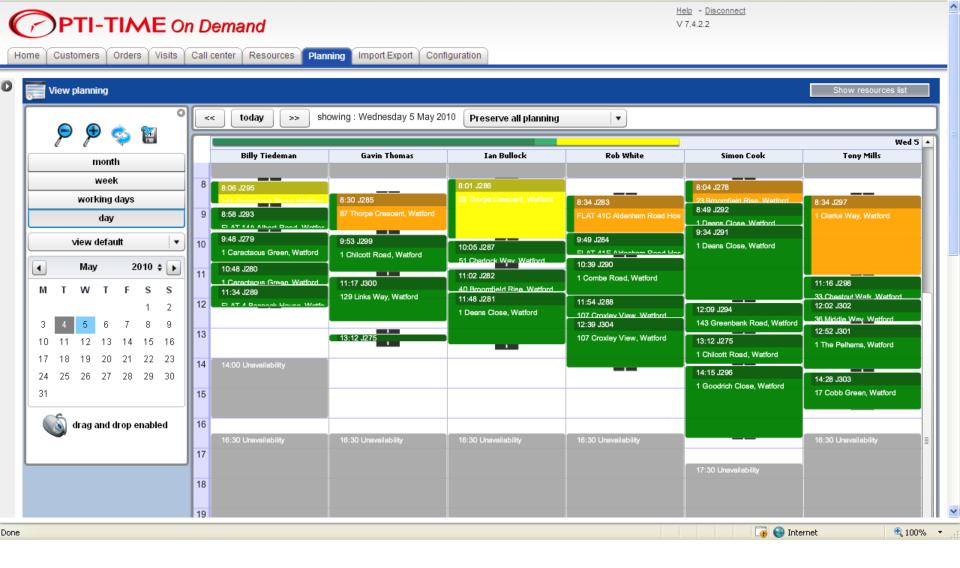


As other operatives start the schedule continues to update with actual start times being reflected. Other jobs are continually being re-assessed with new work coming in to see if there is a better way of allocating the jobs



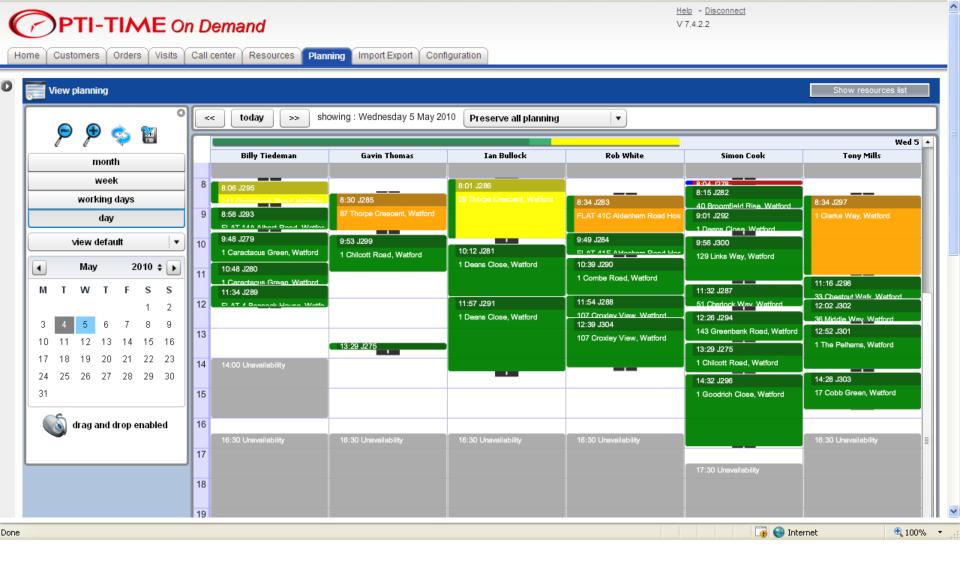
Operatives work one job at a time, this has been clearly shown to increase jobs per day completed by 20% to 40% and improves customer focus and first time fix performance





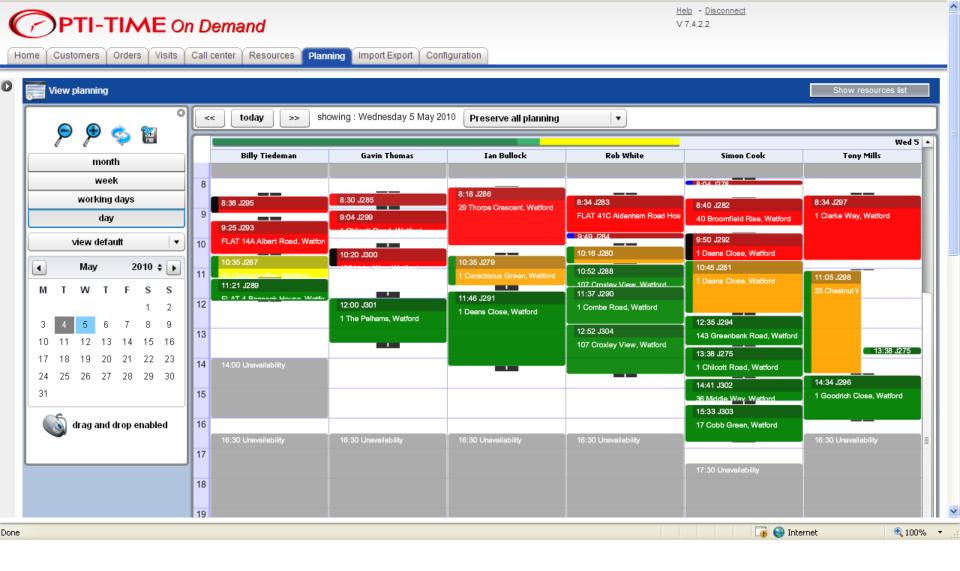
Four jobs have now started. Actual start times are reflected in the dairies





The job that has turned red is completed – the small blue bar on the left shows this was a No-Access visit, the operative will move on his next visit once the planner has confirmed the tenant cannot be contacted





As the day continues, OPTI-TIME gives you unrivalled visibility of the day. The blue side bars show no-access, black side bars show jobs followed on, all red are fully complete. In the above scenario, the planner would be pulling additional work in to ensure all operatives stayed busy all day.













# APSE Xmbrace Industry Briefing



#### Background

- 20+ years experience of Repairs
- 200+ customers
- Macro level all the same objectives
- Micro level all do it differently
- No overriding "right" way
- Many "wrong" ways
- Probably a better way





#### Agenda

- Partnering
- Separate or combined teams
- Systems thinking
- Top 10 operational tips
- Performance measurement
- Mobile update
- 2 hour slots









#### **Partnering**



#### What works well

- Sharing staff
- Clients taking ownership of contractor staff training
- Planners and call centre staff working together
- Planners trusted to react as required
- Good demand management
- Trust
- Close operational joint management
- Regular reviews and adjustment





#### What causes problems

- Schedule of rates
- Unrealistic appointment slots
- Measuring the wrong things— W.Y.M.I.W.Y.G
  - Call centre times v right info on job
  - Job priorities / SMV variances
- Not measuring the right things
  - Jobs per day / first time fix / Turnaround times
- Repair diagnosis









Is it better to have separate or combined teams for responsive and voids?



### Flexibility is key

- Need interchangeable pools of 3 − 6
- Need to be able to get from one side of patch to other in 60(?) minutes
- Separate teams easier to manage / focus
- Weekly adjust balance between teams
- Can increase flexibility by
  - Merging teams
  - Identifying common repairs
  - Time profiling areas
  - Reduce emergencies









Are scheduling and Systems Thinking compatible?



## Common ground

- Process simplification
- One job at a time
- Operative empowerment
- Centralised planners
- First time fix focus
- Culture change





#### What scheduling can add

- First point of contact appointments
- Reduced back-office admin
- Less stressed planners
- Scales to whole workforce
- More jobs per day
- Customer focused and workforce focused process









# Top 10 Operations Checklist



#### **Top 10**

- Count jobs per day
- One job at a time
- Manage demand
- Appointment reminders
- Empower planners
- Investigate first time fix failure
- Drive down emergencies
- Complete every job
- Post completion call to customer
- Balance areas









What should you be measuring to understand performance?



#### What is important to your customer?

- Appointment wait time
- Convenient appointment
- Appointment kept
- First time fix (wait in once)
- Soft issues;
  - Helpful, friendly
  - Operative behaviour
  - Can do attitude





#### What else matters?

Jobs per day!





### Identify causes of problems

- Emergencies?
- Particular area?
- Trade?
- Materials?
- Particular operatives?









Mobile working update



### Mobile working

- Uncertainty at the moment
  - Google & Motorola / Microsoft & Nokia
  - Windows Mobile 6.5 >>> Windows Phone 7.5?
  - Android, iPhone?
  - Devices: consumer v business?
    - PDAs / Tablets / Netbooks
- Back office supplier v 3<sup>rd</sup> party mobile
- Integration / Flexibility
- Signal reliability & job dispatch









Should you be offering 2 hour appointment slots?



# **Probably Not**





### Why not?

- Conflicts with first time fix
- Not a real issue
- Housing repairs not the same as Supermarkets
- Reduces productivity
- Needs more resources
- Increases appointment wait times
- Fix within slot vs arrive within slot





#### Thank you for your time



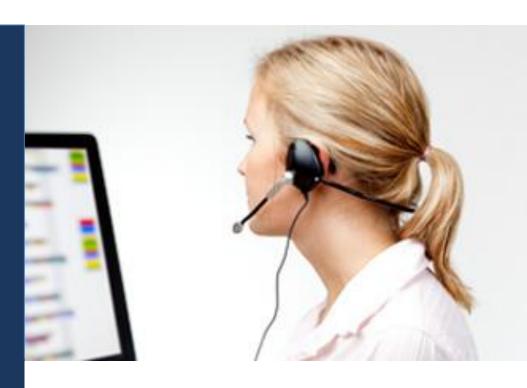








myOPTI-TIME performance monitor



#### Performance Monitor

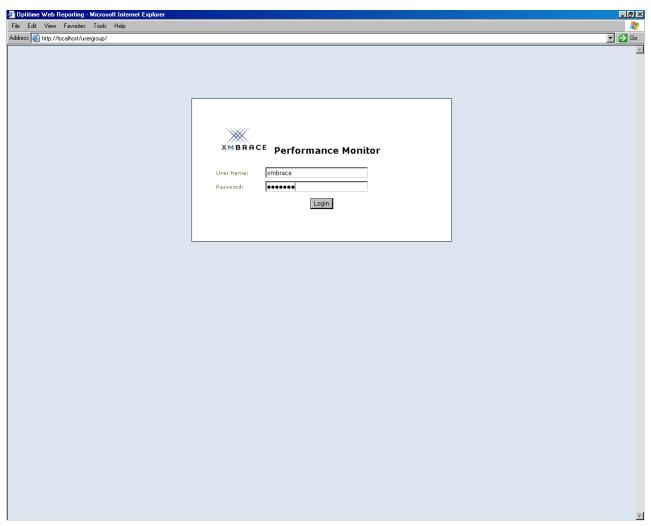
- Appointments extracted from Diaries
  - Daily
  - Rerun on following day if any appointments in open status
- Data transferred to Web Server
- Data summarised to Resource Group, Priority Group level
  - E.g. Carpenters into Resource Group Carpentry
  - Urgent and Emergency into Priority Group Emergency
- Web application interrogates summarised data







# Login screen

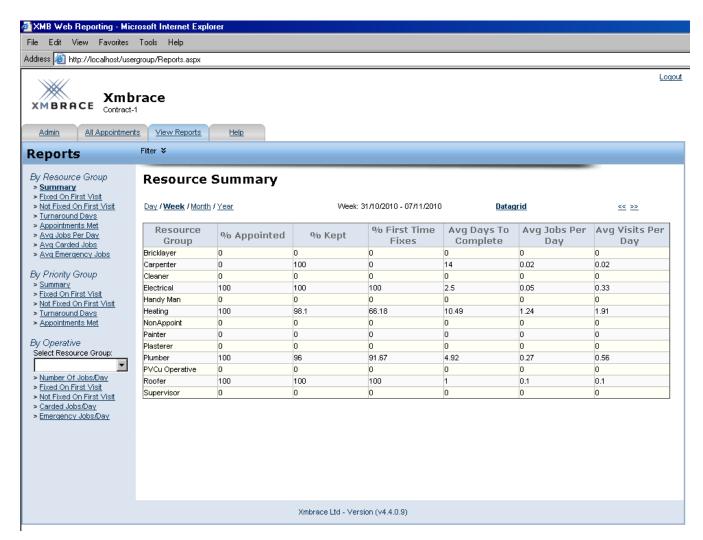








#### Summary figures for week



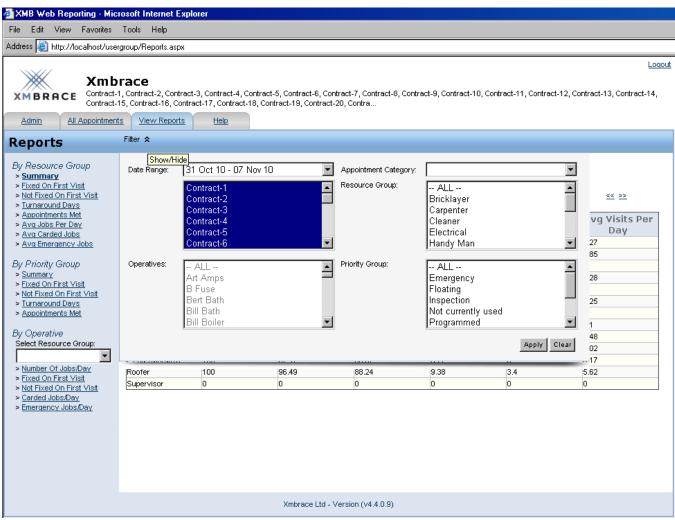
First Time Fix = Completed Orders







#### **Filters**



Filter for:

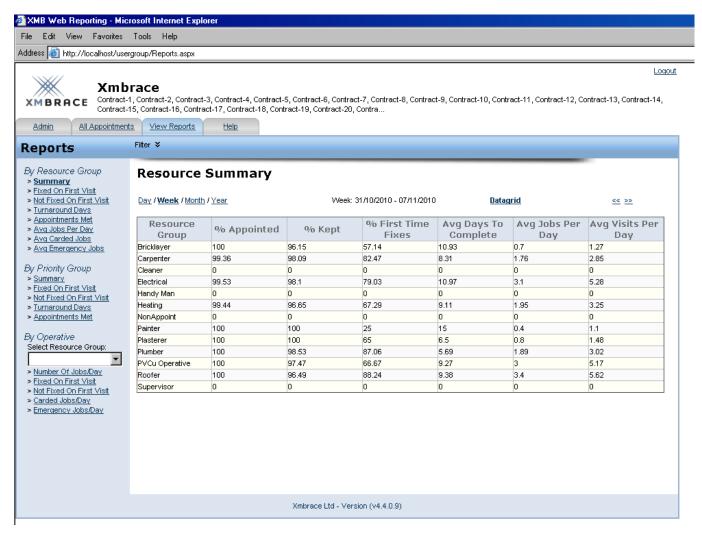
- Dates,
- Contracts,
- •Resource Groups
- Priority Groups







#### Resource Summary



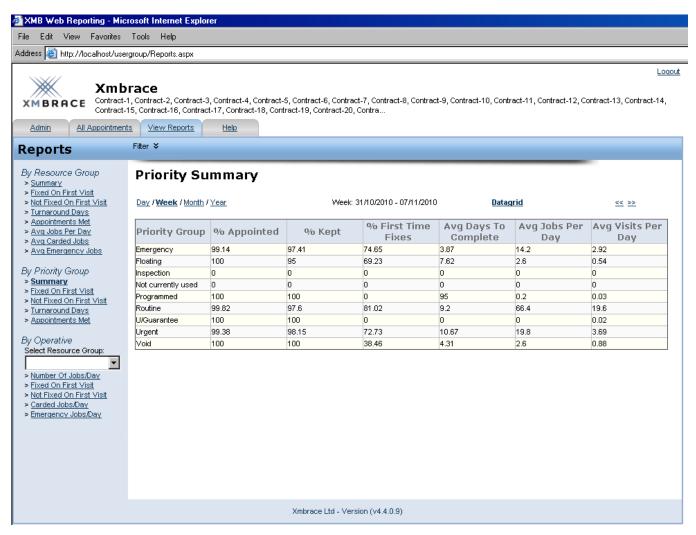
Summary for all Contracts







### Summary by Priority



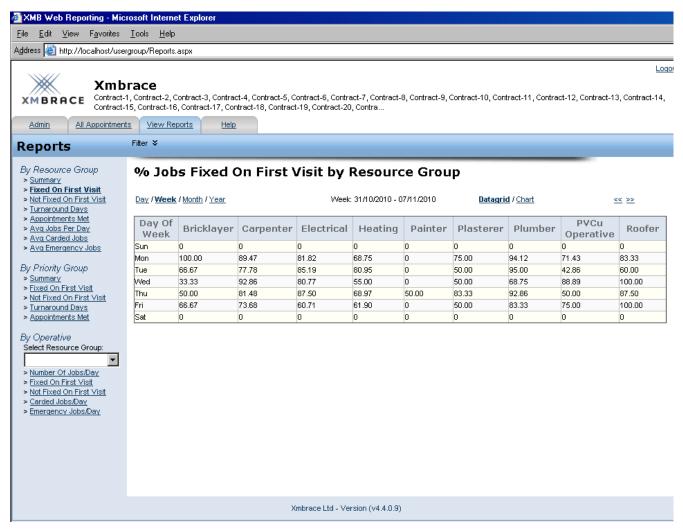
Similar, by Priority instead of Resource







#### First time fixes



% Fixed on First Visit

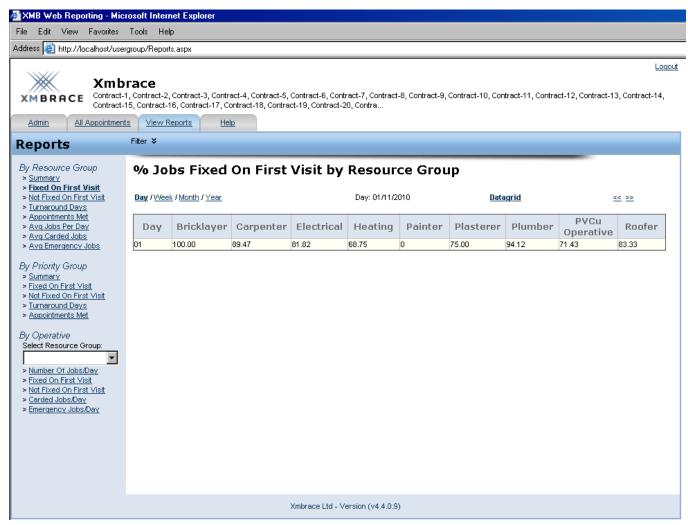
Based on Completed Orders







#### First time fixes by day

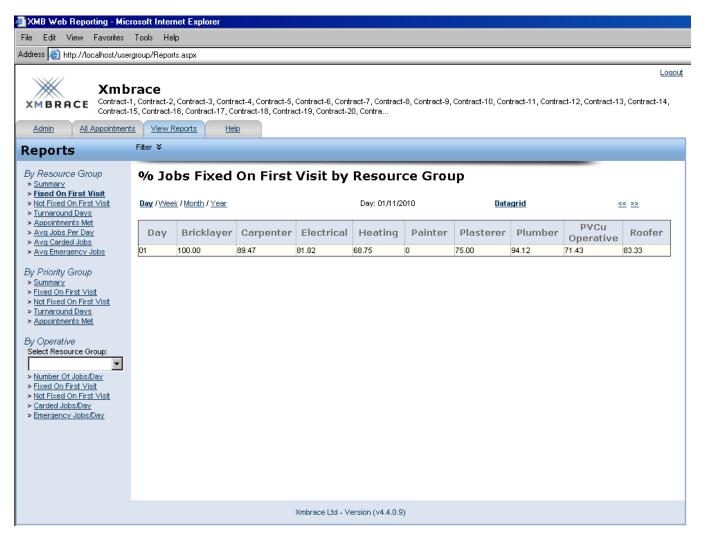


% Fixed on First Visit By Day





### First time fixes by month



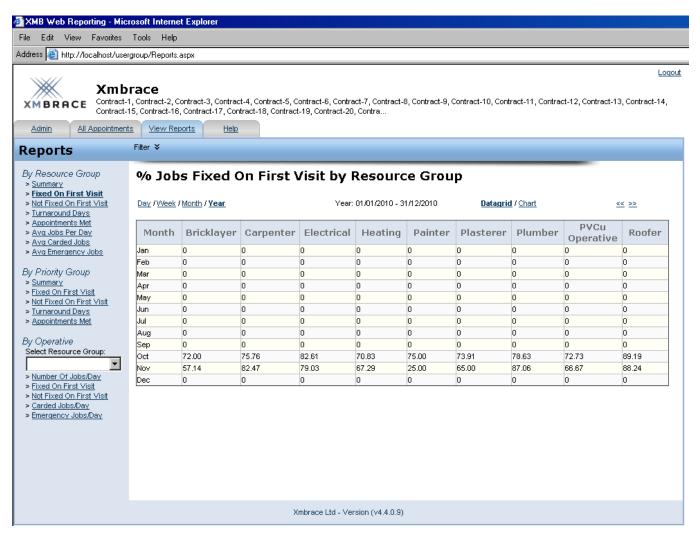
% Fixed on First Visit For Month







#### First time fixes by year



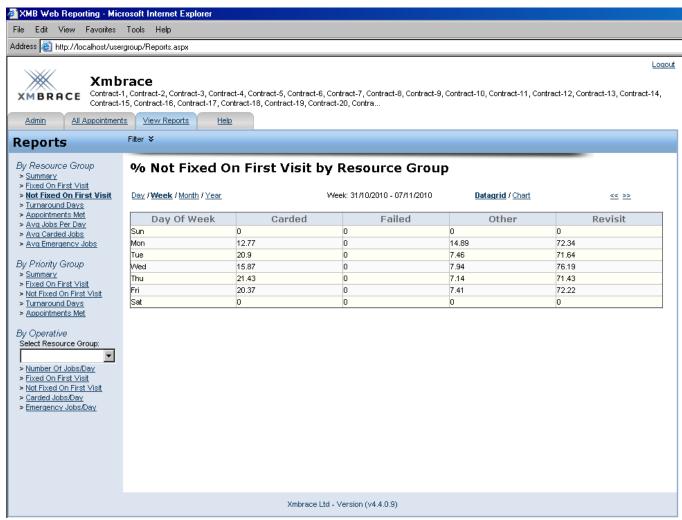
% Fixed on First Visit For Year







#### Not fixed on first visit



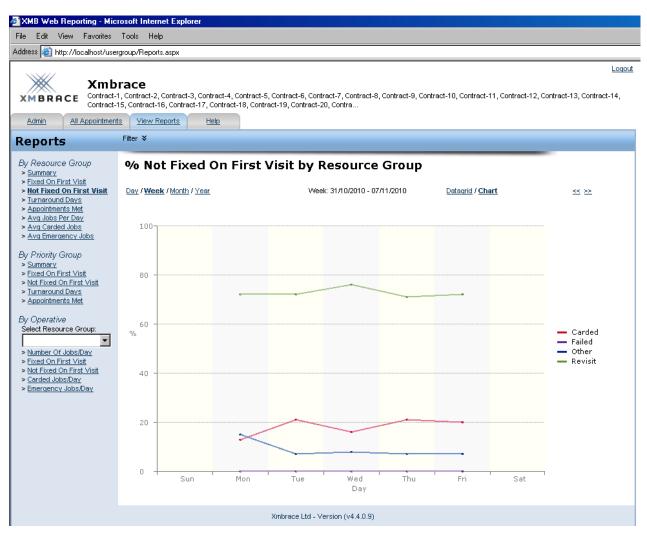
Not Fixed on First Visit

Based on Appointments





### Graphical view



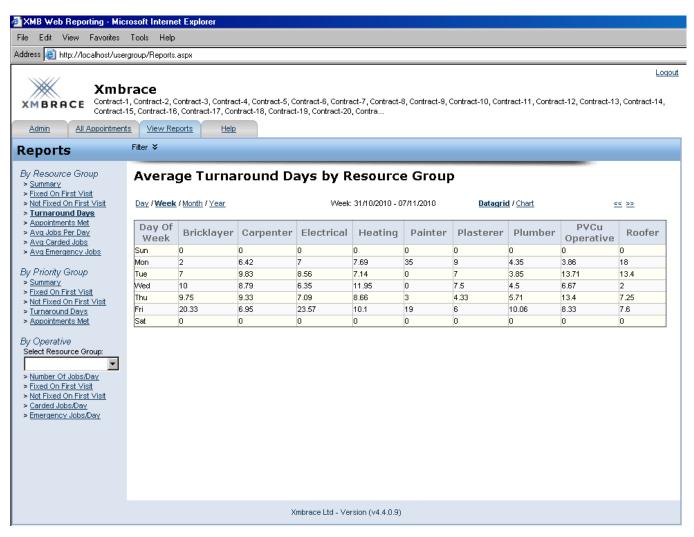
% Not Fixed on First Visit As Chart







#### Turnaround days



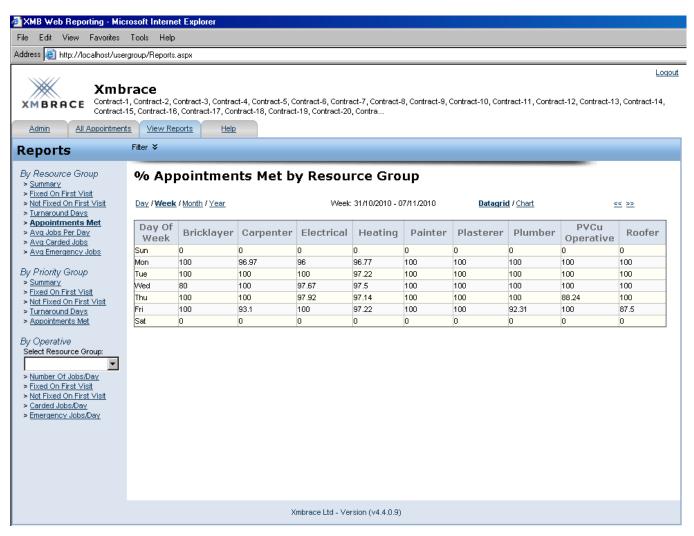
Turnaround Days







#### Appointments met



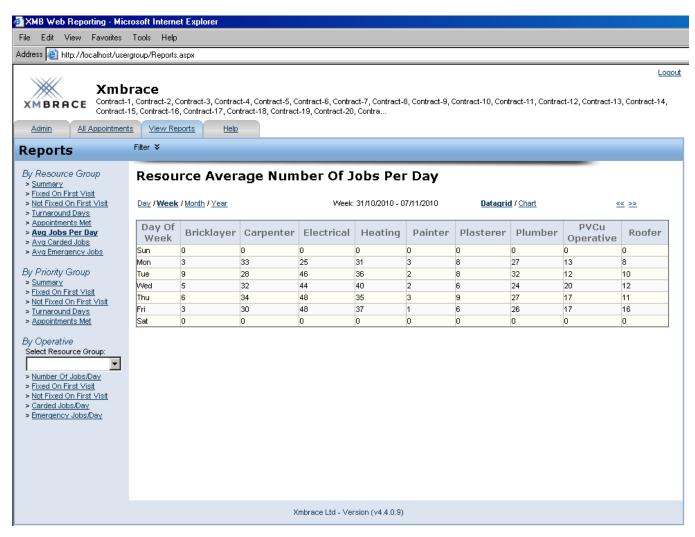
Appointments Met







# Number of jobs / day



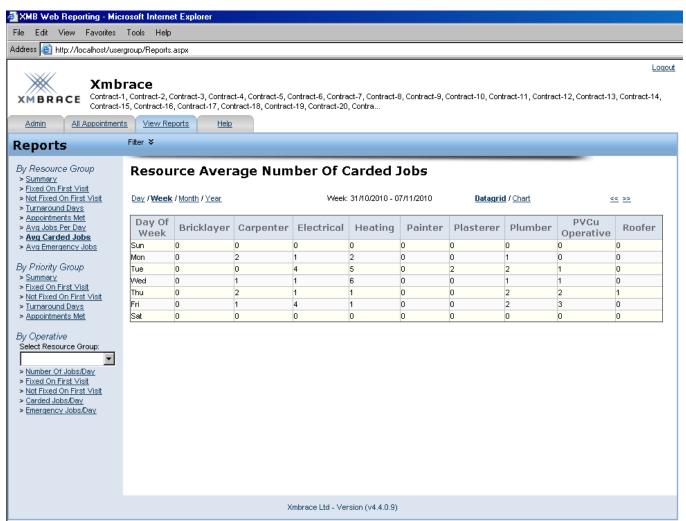
Number of Jobs / Day







### Carded jobs



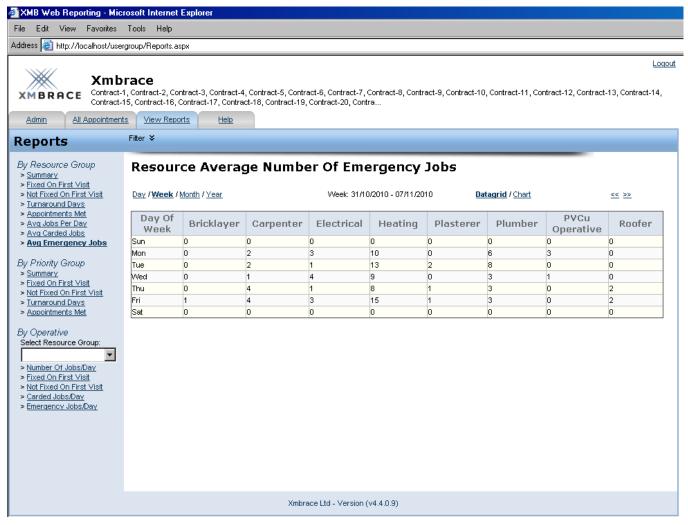
Carded Jobs







### **Emergency jobs**



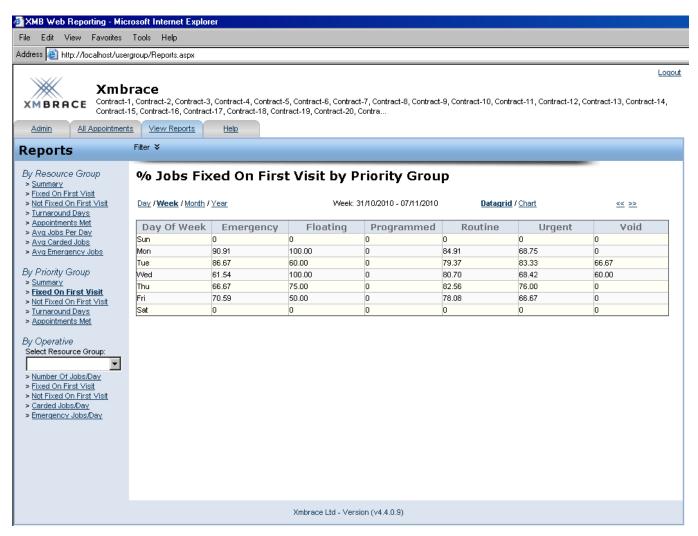
Emergency Jobs







### Analysis by Priority Group



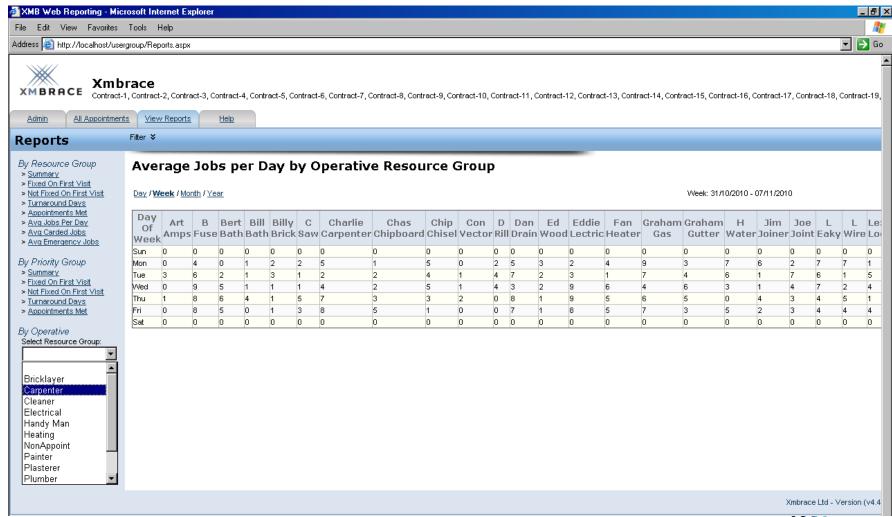
Similar Screens by Priority Group







# Operative Jobs / Day

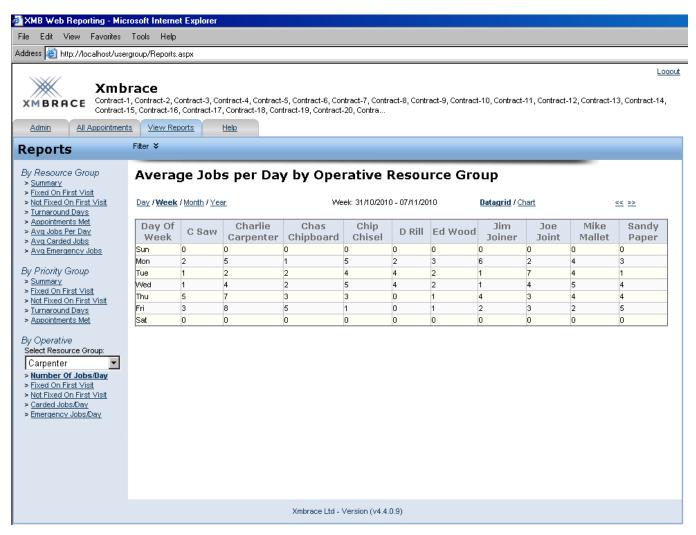








# Jobs / Day for Carpenters



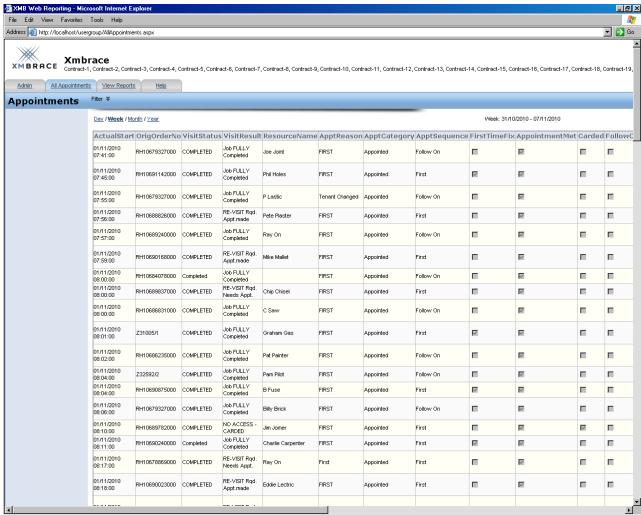
Jobs / Day for Carpenters







#### **Appointments Summarised**



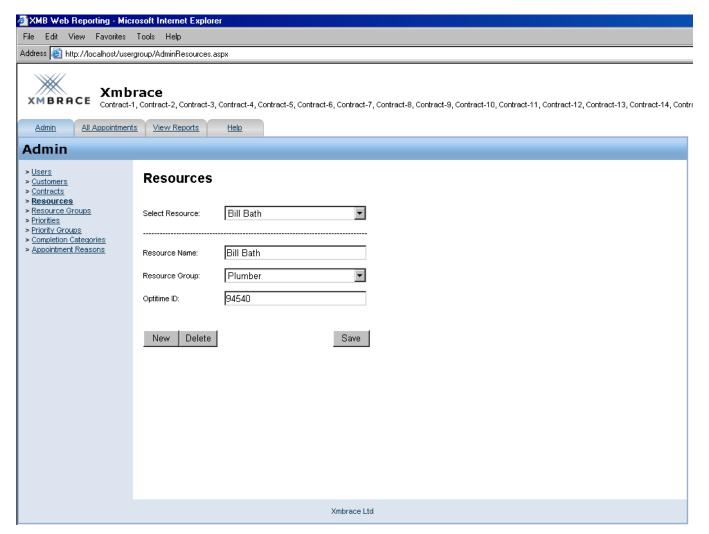
**Appointments** Summarised on Screens







#### Maintenance of control tables



Maintenance of Control Tables











