

Institution Name: **Brunel University**

Department: Corporate Information Systems, Computer Centre

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Objective of the Brunel University Incident Database:

Brunel University has over 14,000 students, 2000+ staff and is currently split over 3 Campus's. There are several Halls of Residence on campus providing accommodation for 3000+ students. A key component in Brunel's success in making this a safe and secure environment for both students and staff has been the development and implementation of an in-house, integrated Incident database system.

Until recently, any incidents on campus (24x7) whether student related or not were recorded by Security staff on paper log sheets. These were the prime records for use by Security and Facilities in any follow up actions and for historical reference. Additionally, they were analysed daily by Facilities staff, and photocopies of the log sheets (marked appropriately) then faxed around the campus to appropriate areas, such as Accommodation/Residences and Maintenance, for further action.

The appointment of a new Managing Director (Resources and Operations) overseeing all Administrative Departments soon highlighted the severe problems in this area. He couldn't see centrally what was happening across the University and departments were handicapped in meeting their responsibilities. Data quality was poor and required interpretation; information dispersal was untimely and often didn't get to the right person(s); individual departments worked independently; incident tracking and monitoring was virtually non-existent; management and statistical reports were not available, etc.

Something had to be done as a priority!

Description of The Incident Database:

The system developed is linked to several other key systems including student records, accommodation, facilities and finance. This allows the seamless use of other essential data for records, display, reports and analysis.

Security log every incident whether student related or not; Residences log campus student related incidents. Appendix 1 and 2 show the screens used respectively by Security and Residences. The types of incidents include break-ins, damage, harassment, safety breach, vehicle, fire alarm, etc. A full list (currently 29 categories) is shown in Appendix 3.

As incidents are recorded, they become immediately available to several departments throughout the University – there are currently over 75 Users. For instance, Fire Alarm activations will be seen and dealt with by the Fire Alarm engineers; Maintenance pick up on maintenance needs; Residences are aware of on-campus student incidents; Health & Safety are aware of potential issues; Managing Director office are aware of serious incidents involving students/staff, etc.

Using the Incident Database

The system is deliberately designed to be role based, with multi-use individual screens per role. In this way, users only have access to data they are authorised to see (Data Protection), and training requirements are small as the individual screen 'look' is intuitive to each users needs.

Initial data input is kept to a minimum. Drop down lists to populate fields (e.g. Type and Place of incident) are used for completeness and consistency of base data. Tick boxes are used for selection purposes (e.g. Services called, Student Involvement). Student data (where applicable) is populated from the Student Records system on entry of just a Student ID or Access ID number.

From their one screen, security guards can enter new incidents, query a previous incident (checking follow-up actions/progression) or search by name, registration number, access card number or Hall of Residence. This gives them further access to both campus and home addresses for students, plus a photo of the student. They can also see any alerts set up for them by the Security Manager.

The Managing Director or an individual Residences manager can see, at the click of a button, all previous incidents reported on a particular student as well as any information on previous disciplinary action, e.g. fines (from Finance system.) Notes with dates can be added, to which other staff can see and/or add further information. A complete chronological history is created, with actions and status recorded. Outcome indicators are visible: Under Investigation - No Action – Verbal Warning – 1st Written Warning , etc through to Expel/Banned. The latter would cause an automatic entry onto the Accommodation system to alert accommodation staff.

A range of management and statistical reports are available to the Managing Director and other Users, according to needs. These can range from summary reports of daily, weekly, monthly incidents categorised by such things as type, location, status to comparison reports and trend analysis.

Supporting Documentation:

The impact on the business of the University has been substantial since its introduction, and this can be shown by looking at how it has affected 3 key user areas: Security, Residences and Managing Director.

Security – Dave Wilson, Security Control Room Manager

“Before the Incident database we recorded everything on paper in log-books. These were often written up after an event relying on memory, with no formal structure. There was no means to check student information or previous history. The logbooks then had to be duplicated, photocopied, distributed via fax and internal post. The only feedback was complaints about missing reports or incomplete/unreadable data or delays – little about actions resulting from an incident. The security staff had little motivation.

Now the security team and their management can do their job properly. It is easy and quick to enter information about incidents. We have instant and current information readily available when dealing with an incident, 24 x 7 x 365. We can confirm information – photos of students being particularly useful – and check on any previous history. We can see what happens after our initial dealings with an incident. We have analysed trends and we can predict, for instance, increases in theft at certain times of the year and take appropriate pro-active measures. In our liaison with the local police over security in the wider community, we can use incident statistics to reinforce our viewpoints. The profile of Security has increased and the esteem felt by the staff in their role has improved.

How we managed without it, I do not know.....”

Residences – Janet Bryan, Head of Residences

“The system integrates what happens elsewhere on Campus with what happens in Residences. Before we only received information about an incident if it was thought to involve a Residence – and then it was often 2-3 days later or the information was so incomplete, that there was little we could do. And any Residences incident dealt with by us could have been unknown to Security.

Now we can see in real time what is happening anywhere at any time in a 24-hour day, as well as do specific searches for our own Residential areas.

The link to the Accommodation system alerts us to not moving or allocating a new room to a student, and any subsequent attempt in the future gets referred back. We can analyse incidents across Residences, or do year on year comparisons. It is easy to use and identifies individual or common problems for our attention. Being able to see the Fines history for a student (extracted from the Student Account on the Finance system) plus the history of previous ‘warnings’ ensures we follow escalating policy guidelines accurately.

The analysis of statistical data available and the management information produced has many uses. In one use, we demonstrated the need for additional resources by creating a case study of Fire Alarms (Malicious/Accidental/Real) from the information available. In another, the management information available and the actual use of such a system helps us in our submission for a prestige Hospitality Award. And, of course, it provides evidence of actions taken when students follow up on complaints they have made about Residential issues.

In summary, I can’t imagine life without it.....”

Managing Director’s Office – Paul Bowler, Managing Director

“The key achievement of the Incident database is integration. Before its inception, we had individual departments doing their own thing, often based on inadequate or misleading information. And the mechanisms for sharing even poor information were hopelessly inefficient. I had no ability to see the total picture of incidents on a daily basis. Compiling information for central management purposes was awful.

Now the right information is available at the right time to the right person. In my office, we can now prioritise events for managing them at the correct level. The search facilities are excellent and allow us to retrieve complete relevant information about an incident – times, places, people, actions, etc - vital when dealing with serious incidents or with external queries. The Security team are more productive, as they feel their work is now useful and leads to positive action.

The usefulness of the system extends outside the University. For example, essential statistics for external reporting are easily obtainable by the Health & Safety officer. And it provides the basis for an information sharing protocol with the Metropolitan police.

In short, we needed a system – and now we have an excellent system!”

Summary

The Incident database system was developed to meet real and urgent business needs. The development followed best practice in being derived from a thorough analysis of user requirements, and recognising the value to be added by integrating it with other existing systems. It is easily maintained, being based on an industry standard Oracle database using Oracle development tools.

It meets the User needs now, but is equally capable of further development and expansion in the future.

Appendices: attached

Name of Staff involved: Julie Dearsley, Systems Officer (Development)
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Appendix 1

BRUNEL UNIVERSITY
Security Incidents Report incident 1 10g

ENTERED BY [dropdown] GUARD ATTENDING [dropdown] **PRINT THIS INCIDENT**

TIME From [dropdown] To [dropdown] Reported on [dropdown] Time [dropdown]

TYPE [dropdown] IF TYPE FR1 2 or 3 [dropdown]

Place [dropdown] Contact Phone No [dropdown]

Where [dropdown]

Witnesses/ Reported by [text area]

INCIDENT [text area]

Action [text area]

Current Position [dropdown]

Which Service called?

- Ambulance
- First Aid
- Police
- Security Manager
- Fire Brigade
- Maintenance
- Residence Manger

STORE **NEW ENTRY** **Enter Search Query** **SEARCH**

DAILY ALERTS!
 Student's Previous Records
 STUDENT SEARCH
 Student Search 2
 Crime Reference
 Officer Involved
 CCTV NUMBERS

Checked by Supervisor for completion
 Ref [dropdown] Acad Yr [dropdown]

Students Involved

Enter surname and % or surname%firstname% ie SMITH% or SMITH%JOHN% into name and clickon arrow OR if you have the student code enter into stu_code without the /1 or /2 or /3

Enrolment Status [dropdown] **STORE** **Enter Next Student**

INVOLVEMENT

- Witness
- Perpetrator
- Victim
- Other

NAME [dropdown]

STU CODE [dropdown] Janus Id [dropdown] Room No [dropdown]

School [dropdown]

Tutor [dropdown] Year [dropdown] Acad Year [dropdown]

OUTCOME [dropdown]

Addresses [button]

Student Search 2

BRUNEL UNIVERSITY
Security Incidents Report incident 1 10g

Search by Surname or Campus

BACK Enter new query SEARCH

Stu Code [text input]

Surname [text input]

forename 1 [text input]

Forename 2 [text input]

Gender

Emergency Contact [text input]

Home [text input]

Home Teleno [text input]

Term Time [text input]

Campus Accommodation

To search on campus students enter 0% etc see list and SEARCH

- 0% = Mill Hall
- 1% = Saltash
- 2% = Chepstow
- 3% = Clifton
- 4% = Isambard
- 5% = Faraday
- 6% = Fleming
- 7% = Galbraith
- 9% = Head Lease
- U% = RAF

Appendix 2

BRUNEL UNIVERSITY
HALLS Managers Incidents Report incihmgr 1 10g

Entered by: [] Guard Attending: [] Student's Previous Records: []

Time: [] From [] To [] Reported on: [] Time: []

Type: [] If Type = FR1 2 or 3: [] Which Service called?:
 Ambulance
 First Aid
 Police
 Security Manager
 Fire Brigade
 Maintenance
 Residence Manger

Place: [] Contact Phone No: [] STATUS: []

Where: [] Crime Reference: []

Witnesses/ Reported by: [] Officer Involved: []

Incident: [] CCTV NUMBERS: []

Action: [] Checked by Supervisor for completion

Current Position: [] STORE NEW ENTRY Enter Search Query SEARCH Ref: [] Acad Yr: []

Students Involved
 Enter surname and % or surname%firstname% ie SMITH% or SMITH%JOHN% into name and click on arrow OR if you have the student code enter into stu_code without the /1 or /2 or /3

Name: [] Involvement:
 Witness
 Perpetrator
 Victim
 Other

Stu Code: [] Janu: [] Room: [] Outcome: [] ALERT ACCOMMODATION Addresses

Tutor: [] Year: [] Next Student STORE PRINT WP DOC STUDENT NOTES STUDENT_HISTORY OTHER INCIDENTS

Student History

BRUNEL UNIVERSITY
HALLS Managers Incidents Report incihmgr 1 10g

History of Accommodation Fines Back

Date to Finance	Invoice Line	Amount

History of Student on Residents Data Base Surname: []

Status: [] Room: [] Acad Year: []

Letter Sent: [] Fine: [] Damage Fine: []

below may refer to other records for this student

Written Warning:
 1st Written Warning with fine:
 2nd Written Warning with fine:
 3rd Written Warning with fine:
 Expel/Banned from Residences:

Note: []

Fees & Charges Fines (PRE AUGUST 2003)

Post Dat: []

Trx Amt: []

Symmetry Fines

GI Code: [] Net Amount: [] Gross Amount: []

Item Description: []

Notes

Oracle Forms Runtime

Action Edit Query Block Record Field Window Help

BRUNEL UNIVERSITY

HALLS Managers Incidents Report incihmgr 1 10g

STUDENT INCIDENT NOTES

Note Ref:

Stu Code:

Note:

Status:

Created By: Updated By:

Created Date: Updated Date:

Appendix 3

INCIDENT_CODE INCIDENT_DESC

AC1	ACCESS CONTROL INFRINGEMENT
AC2	INTUDER ALARM ACTIVATIONS
AC3	PANIC ALARM ACTIVATIONS
BT1	BREAK-IN/THEFT (from halls of residence)
BT2	BREAK-IN/THEFT (from academic areas)
BT3	BREAK-IN/THEFT (from other areas)
BT4	THEFT (bicycles)
DA1	DAMAGE
DD1	DRUGS/DRINK
F1	FACILITIES - MISCELLANEOUS
F2	FACILITIES - LOST PROPERTY
FR1	FIRE ALARM - ACTIVATION
FR2	FIRE ALARM - PRE ALARM
FR3	FIRE ALARM - FAULT
FR4	EXTERNAL FIRE
HA1	HARRASSMENT
MN1	MAINTENANCE
NO1	NOISE (in halls of residence)
NO2	NOISE (in other areas)
OB1	OBSCENE INCIDENTS
R1	RESIDENCES - STUDENT LOCK OUTS
R2	RESIDENCES - MISCELLANEOUS
SA1	ACCIDENTS/ILLNESS
SA2	SAFETY BREACH
TR1	TRAFFIC INCIDENTS
VH1	VEHICLE INCIDENTS (thefts & break-ins)
VL1	VIOLENT INCIDENTS
VL2	VERBAL ABUSE (directed at security)
VL3	VERBAL ABUSE (directed at others)