# Software Development

# U301 - Analysing information problems

## Background

Dogs All Groomed Sweetly (DAGS) is a pet grooming salon and mobile service run by Harry McLary (formerly of Donaldson’s Dairy) based in the leafy green suburbs of Ivanhoe. After spending several years training in in Paris under the tutelage of Tommy Holedigger the famous grooming artist, Harry finally achieved his Canine Coiffures Certificate and returned to Melbourne with hopes as grand as his silver & diamanté clippers.

The salon is located in a two storey building on Upper Heidelberg Road, Ivanhoe, the upper floor of which contains his sister’s business Pawsitivley, distributors of fine animal clothing (no, not clothing made from animals). Clients enter the DAGS via the front entrance on Upper Heidelberg Road where they are usually greeted by Harry’s loyal and faithful assistant Lassie Schnauzer (except in the odd circumstances that Lassie has run out of the office to chase after postman ex-boyfriend). Behind Lassie’s desk is a 1 way glass mirror so that anyone working in the back room can see through to the waiting lounge for any new arrivals.

## The staff at DAGS are:

* Harry McLary : Owner and Primary Grooming Artist
* Lassie Collie : Receptionist
* Clifford Rose (Big Red to his friends) : Senior Clipper
* Frank Benji : Mobile Clipping Artist
* Clarice Precious : Mobile Grooming Artist (formerly specialist lamb groomer)
* Santos L. Helper : Trainee Grooming Artist

## Organisational Goals

DAGS aims to provide a quality grooming experience for all of its four legged (and the occasional 2 & 3 legged) friends while resulting in a visual and nostril pleasing outcome for pooch’s human companions. As well as being profitable, Harry wants his business to have a reputation for the best groomed pets in all of Victoria and the most highly skilled fur designers in the land (possibly with the aim to open his own Canine Coiffures Academy in the future).

## The Current ICT Set-Up

Harry set up the network with the help of Tyson Pooh, his old mate who works in the IT industry. The network works well and is used for a variety of purposes. As well as managing bookings, grooming records, employee details, human companion contact details as well as high quality video feed taken from the clipping salon (to show companions the mental state of their pooch during their pampering), these videos are stored for a minimum of 2 weeks.

Lassie’s desk contains a D-Link 802.11n 300 wireless/router/modem which is connected to the internet on an ADSL 2+ connection. Lassie has her computer connected directly to this whilst one of the Ethernet ports is connected to a multi-function printer/fax, another is connected via Cat 5e cable to an 8 port gigabit switch located at the rear of the building. The switch is connected via 3 ports to different cameras, 2 located in the rear of the salon and another filming the front entrance. Another port is connected to a NAS device that is on all of the time. The NAS has a Gb NIC and contains 2 x 1TB HDD’s arranged in a RAID (mirroring) configuration. Two of the remaining ports are connected to Harry’s computer in his office and the PC in the office shared by Clifford and the mobile groomers who each have a laptop that they take on the road with them. Santos hasn’t been given a desk yet and spends his time when not working lazing about in the lunch-room on his tablet PC or chatting to Lassie (she doesn’t appear to mind and occasionally seems to welcome his distractions – although she’s not keen on the wet dog smell that surrounds him!).

All of the computer hardware is reasonably up to date and is operating efficiently (it is the information system as a whole that is not!)

To allow the mobile groomers and Santos access to the network (and access to the Internet), there is no encryption of the wireless network. The SSID is broadcast as “Private DAGS” which should serve to deter unauthorised access.

## Current process at DAGS

At present, when a human companion wants to have their friend groomed, they call Lassie, who records all of their details and adds them to one of the groomers schedules (see the section below on grooming allocation). As pet hair tends to grow rapidly, much of the business at DAGS is repeat business, so at the end of each month, Lassie sends out bulk invoices and when companions come in, they are expected to settle any outstanding invoices prior to grooming commencing.

Harry’s main difficulties lie with the system that is currently being used to manage the training sessions. This is currently done via a shared Excel spreadsheet that is stored on the NAS.

At the end of a week, Lassie copies the current booking template and places this on the NAS under a new filename (for the coming week). She then notifies the groomers (and Harry) that the template is ready and they access it and make changes to the order and number of pets groomed. At this stage, changes are simply based on where the companion wants the grooming done. Often companions will arrive outside of their normal times or will request a different groomer to care for their friend. The most a mobile groomer can do in one day is 10 sessions or 15 if grooming is being done at the salon. During the week, companions often ring DAGS (and occasionally call mobile groomers on their mobile) and notify them of changes. When these changes are received, the spreadsheet is accessed by the person receiving the change and the change is made.

Prior to their session taking place, groomers access the spreadsheet and print out a list of the clients they’re going to groom that day and if relevant, their addresses. However, this list of clients is often inaccurate and can occasionally contain more clients than there is time for.

Instead of this method, Harry would like to see a number of mobile devices available to the groomers that the groomer can use to make or see these changes immediately and in the case of the mole groomers, before driving on to the next client. A device performing this task could also then be used by Lassie or any staff member that receives a call from a companion about a proposed change.