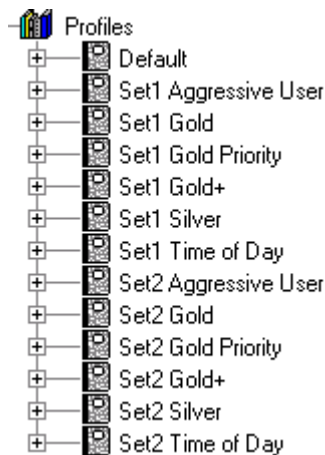




Starting up Dyband using Sample Profiles

For this paper, a familiarity with Dyband terms and concepts is assumed (refer to *Dyband Reviewer's Guide* or *User Guide*). The purpose of this paper is to explain the sample profiles provided by Dyband in `SampleProfiles.exe`. These profiles are not intended for use "as is" without consideration for the specific network environment in which they will be applied. They are provided by Dyband in order to give the user a "jump start" in defining policies appropriate for the user's business.

Twelve profiles are provided, grouped into two sets (Set1 and Set2), as shown in the Dyband topology tree below:



Set1 profiles are intended for networks in which the primary goal is to manage individual hosts, represented as IP Address endpoints in the Dyband topology tree. In Set1:

- each profile contains policies for all five Management Point (MP) types: Gateway, Group, Interface, IP Address, and Subnet MPs
- the IP policies differ from profile to profile (see Table 1 for profile characteristics)
- the policies for the other MP types use default values in all profiles

Set2 profiles illustrate how Subnet policies might be configured if Subnets rather than IP addresses are endpoints in the topology tree. In Set2:

- each profile contains only a Subnet policy
 - The IP policy has been omitted because it is not of interest; the other policies have been omitted since they would be the same as in Set1.
- the Subnet policy settings are the same as Set1's IP policy settings (see Table 1)

Table 1 describes the main characteristics of the sample profiles. The policy settings shown in the table:

- are used for endpoint policies (i.e., for IP policies in Set1 and Subnet policies in Set2)
- are applicable for 2-155 Mbps Shaper licenses
(for licenses <2 Mbps, lower Maximum Rates have been assigned, as shown in Table 3)
- apply to Inbound traffic only

Profile	Main Characteristics	Maximum Rates (Kbps)		Priority		Rate Ramp	Time of Day
		Normal	Congested	Min	Max		
Gold	highest rate limits under both normal and congested conditions	400	80	0	100	-	-
Silver	lower rate limits than Gold	320	64	0	100	-	-
Gold+	same as Gold, but with a higher rate limit under congested conditions (60% rather than 20% of normal)	400	240	0	100	-	-
Gold Priority	same as Gold, but with preferential access to bandwidth	400	80	10	100	-	-
Aggressive User	same as Gold, except for restrictions on total usage	400	80	0	100	√	-
Time of Day	same as Gold, except for Time of Day restrictions	400	80	0	100	-	√

Table 1: Inbound Settings in Sample Endpoint Policies for 2-100 Mbps Shaper Licenses

As indicated in Table 1, the Gold profile is used as the starting point for configuring the other profiles. Table 2 shows the Maximum Rates for all the policies in the Gold profiles (Set1 Gold and Set2 Gold) for Shaper licenses of 2-100 Mbps. For Shaper licenses <2 Mbps, see Table 3.

Profile	Policy	Normal Conditions	Congested Conditions
Set1 Gold	Interface	licensed bandwidth	100% of Normal
	Gateway	"	"
	Group	"	"
	Subnet	"	"
	IP Address	400 Kbps Inbound* 200 Kbps Outbound	20% of Normal (80 Kbps Inbound; 40 Kbps Outbound)
Set2 Gold	Subnet	"	"

Table 2: Maximum Rates in All Gold Policies for 2-100 Mbps Shaper Licenses

* For endpoints, Inbound and Outbound rate limits have been assigned different values simply to illustrate that Inbound and Outbound traffic can be controlled separately.

For Shaper licenses <2 Mbps, the Maximum Rates in Gold endpoint policies (Set1 Gold IP policy and Set2 Gold Subnet policy) are lower than for the other licenses, as shown in Table 3.

Shaper License	Normal Conditions (Kbps)		Congested Conditions (Kbps) - 20% of Normal	
	Inbound	Outbound	Inbound	Outbound
1 Mbps	200	100	40	20
512 Kbps	100	50	20	10
128 Kbps	50	25	10	5

Table 3: Maximum Rates in Gold Endpoint Policies for Shaper Licenses <2 Mbps

All the sample profiles make use of Maximum Rates to control the traffic of endpoint MPs. Note that three of the profiles make use of additional traffic-control features provided by Dyband:

1. The Gold Priority profile raises the Minimum Priority to improve access to bandwidth during periods of congestion (see **Set1 Gold Priority - IP Policy**, below).

- The Aggressive User profile uses Rate Ramps to throttle down sustained high usage (see **Set1 Aggressive User - IP Policy**, below).

Edit Policy: Set1 Aggressive User - IP Policy

Inbound | Outbound | Time Of Day | Defaults

NORMAL CONDITIONS

Maximum Rate: 400 Kbps

Use Rate Ramp:

Final Rate: 100 Kbps

CONGESTED CONDITIONS

Maximum Rate: 20 % of Normal (80 Kbps)

Use Rate Ramp:

Final Rate: 50 Kbps

Maximum Latency: 500 ms

Final Latency: 500 ms

Minimum Priority: 0

Final Priority: 0

Maximum Priority: 100

RATE RAMP

Acceptable Avg Rate: 85 Kbps (38 MB per hour)

Begin Ramp: 1 MB

End Ramp: 3 MB

Max Queue Size: 50 packets

Copy To Outbound

OK Cancel

- The Time of Day profile, designed for residential customers, reduces rate limits during business hours in order to make more bandwidth available to business customers during those hours (see **Set1 Time of Day - IP Policy**, below).

Edit Policy: Set1 Time of Day - IP Policy

Inbound | Outbound | Time Of Day | Defaults

Weekdays

Enable	Start Hour	End Hour	Rate%	Priority%
<input checked="" type="checkbox"/>	7	18	50	100
<input type="checkbox"/>	0	0	100	100
<input type="checkbox"/>	0	0	100	100