

```
// (c) 2010 Fermi Research Alliance
// $Id: DAQData.proto,v 1.1 2011/07/08 18:41:31 kingc Exp $

//
// DPM load balancing messages
//

request LoadMessage {
}

reply LoadMessage {
}

//
// Common DAQ data types....
//

request ReadingRequest {
    string dataRequest[];
}

reply ReadingRequestStatus {
    int16 status[];
}

request SettingRequest {
    string dataRequest[];
}

reply BinarySample {
    binary value;
    int64 time;
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply BooleanSample {
    bool value;
    int64 time;
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply BooleanArraySample {
    bool value[];
    int64 time;
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply ShortSample {
    int16 value;
    int64 time;
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply ShortArraySample {
    int16 value[];
    int64 time;
}
```

```
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply IntegerSample {
    int32 value;
    int64 time;
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply IntegerArraySample {
    int32 value[];
    int64 time;
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply LongSample {
    int64 value;
    int64 time;
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply LongArraySample {
    int64 value[];
    int64 time;
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply DoubleSample {
    double value;
    int64 time;
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply DoubleArraySample {
    double value[];
    int64 time;
    optional string unit;
    optional int16 format_hint;
    optional int16 ref_id;
}

reply StringSample {
    string value;
    int64 time;
    optional int16 ref_id;
}

struct BasicStatus {
    bool on;
    bool positive;
    bool ready;
    bool remote;
    bool ramp;
}
```

```
    string text;
    string colors;
}

reply BasicStatusSample {
    BasicStatus value;
    int64 time;
    optional int16 ref_id;
}

struct AnalogAlarm {
    double minimum;
    double maximum;
    bool alarm_enable;
    bool alarm_status;
    bool abort;
    bool abort_inhibit;
    int32 tries_needed;
    int32 tries_now;
}

reply AnalogAlarmSample {
    AnalogAlarm value;
    int64 time;
    optional int16 ref_id;
}

struct DigitalAlarm {
    int32 nominal;
    int32 mask;
    bool alarm_enable;
    bool alarm_status;
    bool abort;
    bool abort_inhibit;
    int32 tries_needed;
    int32 tries_now;
}

reply DigitalAlarmSample {
    DigitalAlarm value;
    int64 time;
    optional int16 ref_id;
}

reply ControlCommand {
    string command;
    int64 time;
    optional int16 ref_id;
}

reply StatusSample {
    int32 facilityCode;
    int32 errorNumber;
    int64 time;
    optional string message;
    optional int16 ref_id;
}
```