

# Orchestral Articulation Profile

**Selecting Samples by MIDI 2.0 Note On Message**

**SoundTrack: Lucy vs The Butterfly by Peter Schwartz**  
**The Sound Track is 100% Orchestral Sample Libraries**

 **MIDI<sup>®</sup> Association**



# **Current State Of Orchestral Sound Libraries**

**Sample Library Developers use  
Different MIDI Messages  
to Control  
Articulation Selection**



# **MIDI 2.0 Profile For Orchestral Sound Libraries**

**MIDI 2.0 can provide a  
Unified Set of Messages for Articulation  
Selection using the added features in MIDI 2.0  
Note On.**

**This will make orchestral libraries much easier  
to use**

# Orchestral Articulation Profile

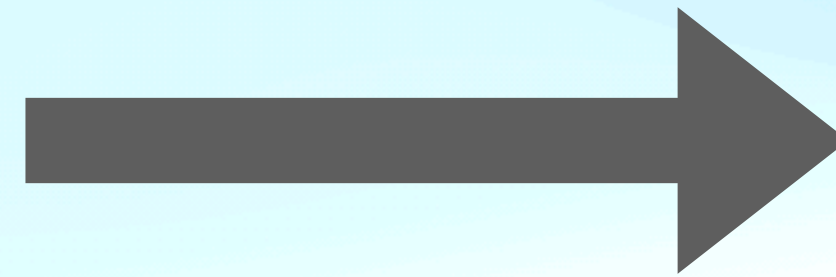


**The Profile provides the overall guidelines for the most common articulations.**

**The sound designer/developer makes the decisions on what to include and exactly how to map it.**

# Goals      Change Libraries Articulations Remain Valid

**Library A**



**Library B**

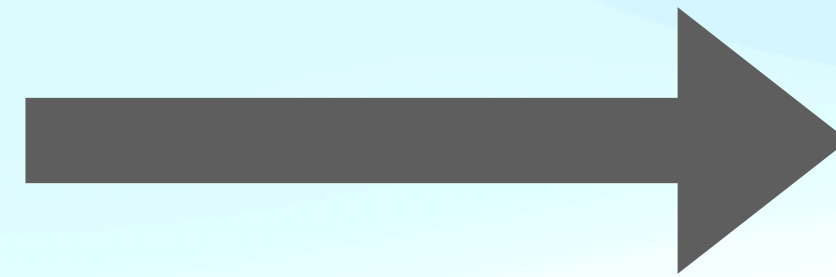


**Easier for Composers to Try Out or  
Substitute Sample Libraries**

# Goals

**Change Instruments and Articulations Remain Valid**

**Instrument A**



**Instrument B**



**Easy to copy from one MIDI Track to another to layer,  
double or hocket a part**

# **Orchestral Articulation Profile**

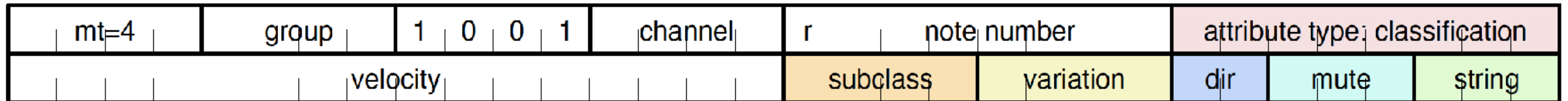
## **MIDI Messages Used:**

- **Expanded Note-On in MIDI 2.0**
- **MIDI 2.0 Controllers**
- **MIDI 2.0 Per Note Controllers**

# Orchestral Articulation Profile

## MIDI 2.0 Note On When The Orchestral Profile Is Enabled

**10 Classifications**



**16 SubClasses  
in each  
Classification**

# Orchestral Articulation Profile Attribute Type: Classification

All sounds are sorted into Categories which are set by the Attribute Type value:

Value	Function
0x00	No Attribute Data (Note characteristics are determined by the Receiver.*)
0x10:	Core Sounds - Sustains and Strikes
0x11:	Additional Colors - Sustained
0x12:	Staccatos and Shorts
0x13:	Fast Tremolo and Same Note Trills/Repeats
0x14:	Intervalic Trills
0x15:	Pitch and Dynamic Gestures
0x16:	Scales, Runs, and Arpeggios
0x17:	Effects and Noises
0x18-1F:	Custom, manufacturer/device specific sounds.

# Orchestral Articulation Profile

## 1 Classification as an Example

Attribute Type	14 Staccatos and Shorts	Strings	Woodwinds	Brass	Non-Pitched Percussion	Tuned Percussion	Guitar/Plucked	Harp	Keyboard/Organ	Choir/Vocals
1	Normal Staccato Off String	•	•	•	•	•	•	•	•	•
2	Normal Staccato On String	•								
3	Slurred Staccato (single bow staccato)	•								
4	Accented Staccato	•	•	•	•	•	•	•	•	•
5	Staccatissimo	•	•	•	•	•	•	•		•
6	Spiccato	•	•	•	•	•	•	•		•
7	Sautillé	•								
8	Martellato	•								
9	Long Staccato or Mezzo Staccato or Louré	•	•	•	•		•	•		•
10	Portato	•	•	•						•
11	Pizzicato	•								
12	Bartok Pizzicato (or Harsh, Hard, Noisy Notes)	•	•	•	•	•	•	•	•	•
13	Col Legno Battuto and Geschlagen	•								
14	Col Legno Gestrichen	•								
15	String Hand Tap/Slap	•			•	•	•	•		•
16	Jete	•								

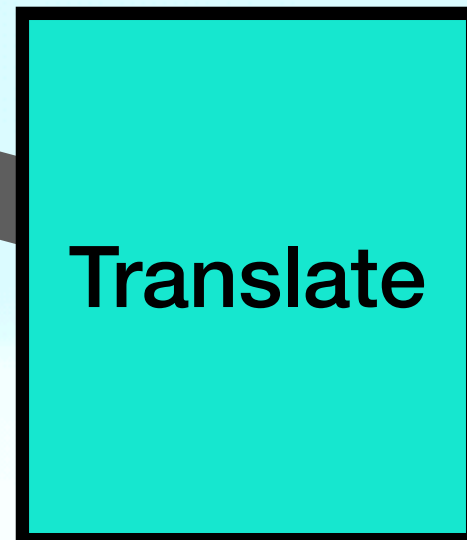
16 Subclass

Suggested Usage Table

# MIDI 1.0



Create MIDI 1.0 Notes  
plus Key Switch or CC



Record MIDI 2.0 Notes  
Edit Articulation  
Play MIDI 2.0 Note



Play MIDI 2.0 Notes  
with Articulation

Translating from  
MIDI 1.0 Notes  
plus Key Switch  
to  
MIDI 2.0 Notes  
with Articulation

Translate from  
MIDI 2.0 Notes  
with Articulation  
to  
MIDI 1.0 Notes  
plus Key Switch

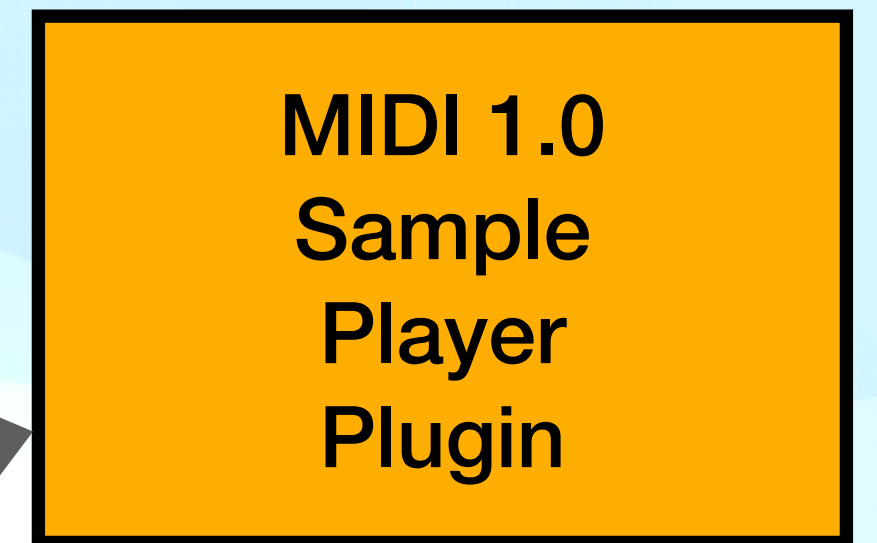
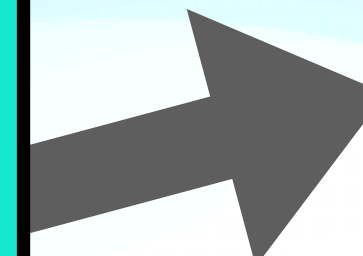
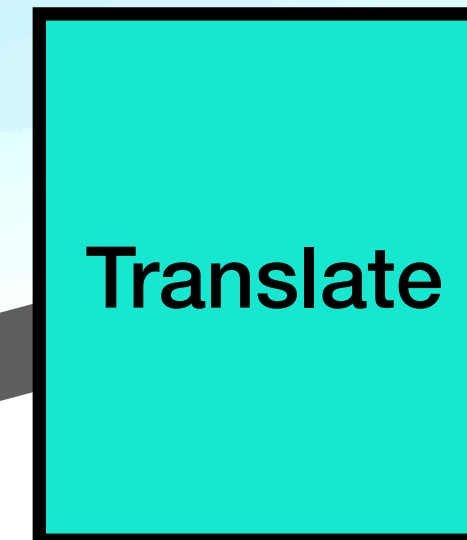
Play MIDI 1.0 Notes  
Certain Notes  
Control Articulation



Create MIDI 2.0  
Note with  
Articulation



Record MIDI 2.0 Notes  
Edit Articulation  
Play MIDI 2.0 Note



# MIDI 2.0



# Contributors

**Peter Schwartz- composer/orchestrator. Musical director for David Bowie, Pet Shop Boys, Enya, Madonna, and many others. Film and TV: Disneytoons, Warner Bros, Fox, and Mattel. Orchestral mockup instructor for the Film Scoring Academy of Europe (Sofia, Bulgaria).**

**Chris Stone- Owns Audio Impressions that creates high definition sample libraries backed by groundbreaking music technology for composers working under extreme deadlines. Works Stone has scored have been nominated for, or won, Emmy Awards, Clio Awards, a Cable/Ace Award and an Oscar.**

**Nikolas Jeroma- Principal Instrument Developer at Native Instruments.**

**Mike Kent- Principal Author/Editor of MIDI 2.0, Authored both the USB MIDI 1 and USB MIDI 2 specifications, worked for Roland R&D Japan for over 25 years and now consultants for Yamaha, Apple and others**

**Ben Israel- Manager of US Content Research and Development office for Yamaha**

**Athan Billias- Orchestral Articulation WG chair /Current President of The MIDI Association.**

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