

ICE Gathering Errors

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Problem

When the PeerConnection fails to gather a candidate (because of a bad TURN server, for example), the JS has no idea.

And the JS would like to know when it works, too.

Handling Success: Add URL to ICE Event

```
// Add "url" to onicecandidate. Lets you know which candidates were
// gathered successfully (i.e. from where).
[ Constructor (DOMString type, RTCPeerConnectionIceEventInit eventInitDict)]
interface RTCPeerConnectionIceEvent : Event {
    readonly attribute RTCIceCandidate candidate; // exists today
    readonly attribute DOMString? url; // the ICE server |candidate| is from
};
```

Handling Failure: Solution A (Generic)

```
// Finally add this.
partial interface RTCPeerConnection {
    attribute EventHandler onerror; //
}

// With a base class for all errors.
enum RTCPeerConnectionErrorType { "ice-gather" };
interface RTCPeerConnectionErrorEvent : Event {
    readonly attribute RTCPeerConnectionErrorType type;
    readonly attribute DOMString description;
};

// .type == "ice-gather"
interface IceCandidateErrorEvent : RTCPeerConnectionErrorEvent {
    DOMString url; // RTCIceServer.uri
    int reason;    // 4xx error from TURN server
                  // 6xx indicating general/connection failure
};
```

Handling Failure: Solution B (Specific)

```
// Add this instead.
```

```
partial interface RTCPeerConnection {  
    attribute EventHandler onicecandidateerror;  
}
```

```
// Details about the error.
```

```
interface IceCandidateErrorEvent : Event {  
    DOMString url; // RTCIceServer.url  
    int reason;    // 4xx error from TURN server  
                // 6xx indicating general/connection failure  
    DOMString description; // e.g. "Authorization failed"  
};
```